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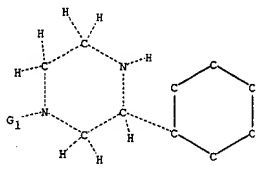
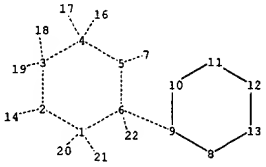
R^1=H (newly added)
Query
4-16-02





chain nodes :
7 14 16 17 18 19 20 21 22
ring nodes :
1 2 3 4 5 6 8 9 10 11 12 13
chain bonds :
1-20 1-21 2-14 3-18 3-19 4-16 4-17 5-7 6-9 6-22
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-13 9-10 10-11 11-12 12-13
exact/norm bonds :
1-2 1-6 1-20 1-21 2-3 2-14 3-4 3-18 3-19 4-5 4-16 4-17 5-6
5-7 6-9 6-22 8-9 8-13 9-10 10-11 11-12 12-13

G1:CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom
10:Atom 11:Atom 12:Atom 13:Atom 14:CLASS 16:CLASS 17:CLASS
18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS

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LOGINID:sssptau122ebb

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Jan 25  BLAST(R) searching in REGISTRY available in STN on the Web
 NEWS  3  Jan 25  Searching with the P indicator for Preparations
 NEWS  4  Jan 29  FSTA has been reloaded and moves to weekly updates
 NEWS  5  Feb 01  DKILIT now produced by FIZ Karlsruhe and has a new update
                  frequency
 NEWS  6  Feb 19  Access via Tymnet and SprintNet Eliminated Effective 3/31/02
 NEWS  7  Mar 08  Gene Names now available in BIOSIS
 NEWS  8  Mar 22  TOXLIT no longer available
 NEWS  9  Mar 22  TRCTHERMO no longer available
 NEWS 10  Mar 28  US Provisional Priorities searched with P in CA/CAplus
                  and USPATFULL
 NEWS 11  Mar 28  LIPINSKI/CALC added for property searching in REGISTRY
 NEWS 12  Apr 02  PAPERCHEM no longer available on STN.  Use PAPERCHEM2 instead.
 NEWS 13  Apr 08  "Ask CAS" for self-help around the clock
 NEWS 14  Apr 09  BEILSTEIN: Reload and Implementation of a New Subject Area
 NEWS 15  Apr 09  ZDB will be removed from STN

 NEWS EXPRESS  February 1 CURRENT WINDOWS VERSION IS V6.0d,
               CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
               AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 12:49:24 ON 16 APR 2002

=> file reg
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 0.21       0.21

FILE 'REGISTRY' ENTERED AT 12:49:30 ON 16 APR 2002
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STRUCTURE FILE UPDATES: 15 APR 2002 HIGHEST RN 405259-61-2
DICTIONARY FILE UPDATES: 15 APR 2002 HIGHEST RN 405259-61-2

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

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L1 STRUCTURE UPLOADED

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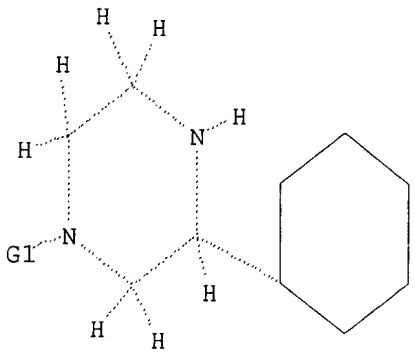
L1 STR



G1 Me,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED -    465 TO ITERATE

100.0% PROCESSED     465 ITERATIONS                                 2 ANSWERS
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          8007 TO    10593
PROJECTED ANSWERS:                2 TO      124

L2            2 SEA SSS SAM L1

=> s l1 sss full
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FULL SCREEN SEARCH COMPLETED -  10180 TO ITERATE

100.0% PROCESSED   10180 ITERATIONS                              13 ANSWERS
SEARCH TIME: 00.00.05

L3           13 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                  140.66     140.87

FILE 'CAPLUS' ENTERED AT 12:50:36 ON 16 APR 2002
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FILE COVERS 1907 - 16 Apr 2002  VOL 136 ISS 16
FILE LAST UPDATED: 14 Apr 2002  (20020414/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the
CAS Registry Numbers that were added to the CAS files between 12/27/01
and 1/23/02.  As of 1/23/02, the situation has been resolved.  Searches
and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry
Numbers with the P indicator executed between 12/27/01 and 1/23/02 may
be incomplete.  See the NEWS message on this topic for more information.

=> s l3
L4           12 L3

=> d l4 1-12 bib abs hitstr
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L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 2001:265372 CAPLUS
DN 134:280862
TI Process for the preparation of a piperazine derivative
IN Maeda, Chiharu; Iishi, Eiichi; Wang, Weigi; Imamiya, Yoshiyuki
PA Sumika Fine Chemicals Co., Ltd., Japan
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001025185	A1	20010412	WO 2000-JP5432	20000814
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	EP 1136470	A1	20010926	EP 2000-962874	20000927
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	JP 1999-280378	A	19990930		
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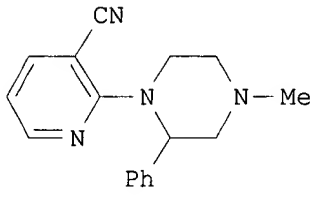
OS CASREACT 134:280862
GI



I

AB A process for the prepn. of a piperazine deriv., namely 2-(4-methyl-3-phenylpiperazin-1-yl)-3-cyanopyridine (I), comprises reacting 1-methyl-3-phenylpiperazine with 2-chloro-3-cyanopyridine in the presence of a base and an alkali metal halide in an aprotic polar org. solvent. This piperazine deriv. I and its oxalate are useful as intermediates for the prepn. of mirtazapine. Thus, 11.4 kg N-methylethanolamine was added dropwise to a soln. of 20 kg styrene oxide in 38 kg DMF at .apprx.80.degree., stirred at .apprx.80.degree. for 3 h, and cooled to room temp. to give a DMF soln. of N-(2-hydroxyethyl)-N-

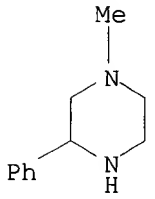
methyl-2-hydroxy-2-phenylethylamine which was added dropwise to a soln. of 45 kg SOCl2 in 67.4 kg toluene at 0-25.degree., stirred at 45-55.degree. for 2 h, cooled at .ltoreq.25.degree., treated dropwise with 95 kg H2O and then with 30 wt.% aq. KOH at 0-25.degree., and left to stand for phase sepn. The org. and aq. phase were sepd. and the aq. phase was extd. with 55 kg toluene, followed by combining the ext. and the org. phase, drying over 4.8 kg MgSO4, treating with 4.8 kg activated clay and filtration, and washing with 19.9 kg PhMe to give a toluene soln. of N-(2-chloroethyl)-N-methyl-2-chloro-2-phenylethylamine (II). To the toluene soln. was introduced 5.5 kg HCl(g) at 10-35.degree. and stirred at 20-25.degree. for 2 h and the pptd. crystals were filtered and washed with 69 kg toluene to give 30 kg II.HCl. EtOAc (100 mL), 460 mg Bu4NBr, and 20.1 g II.HCl were added to 132 g 28% aq. NH3 at room temp. and stirred at 40-45.degree. for 3 h, followed by sepg. the org. layer and extg. the aq. layer with EtOAc (2 .times. 30 mL) and the combined org. layer evapd. in vacuo to give 53.8% 1-methyl-3-phenylpiperazine (III) (7.1 g). III 5.51, 2-chloro-3-cyanopyridine 4.47, Et3N 4.1, and KI 5.20 g were added to 11 mL DMF and stirred at 125-130.degree. for 24 h, followed by removing Et3N and DMF under reduced pressure, adding 20 mL H2O and 25 mL EtOAc to the residue, adjusting pH at 8-9 with 10% NaOH, sepg. the org. phase, and extg. the aq. layer with EtOAc (3 .times. 30 mL), washing the combined the org. layer with 5% NaHCO3, drying and concn., and crystn. from petroleum ether 36% I (3.14 g, 97.1% purity).

IT **5271-27-2P**

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of (methylphenylpiperazinyl)cyanopyridine as intermediate for mirtazapine)

RN 5271-27-2 CAPLUS

CN Piperazine, 1-methyl-3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 2001:247305 CAPLUS
DN 134:266325
TI Process for the preparation of a piperazine derivative
IN Maeda, Chiharu; Iishi, Eiichi; Wang, Weigi; Imamiya, Yoshiyuki
PA Sumika Fine Chemicals Co., Ltd., Japan
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001023345	A1	20010405	WO 2000-JP6650	20000927
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	WO 2001025185	A1	20010412	WO 2000-JP5432	20000814
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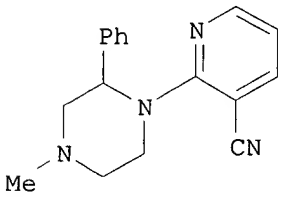
	EP 1136470	A1	20010926	EP 2000-962874	20000927
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	JP 1999-280378	A	19990930		
	WO 2000-JP5432	W	20000814		
	WO 2000-JP6650	W	20000927		

OS CASREACT 134:266325
GI



I

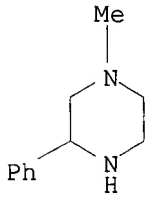
AB A process for the prepn. of a piperazine deriv. represented by formula (I), namely 2-(4-methyl-2-phenylpiperazin-1-yl)-3-cyanopyridine, comprises reacting 1-methyl-3-phenylpiperazine (II) with 2-chloro-3-cyanopyridine (III) in the presence of a base and an alkali metal halide in an aprotic polar org. solvent. This piperazine deriv. and its oxalate are useful as intermediates for the prepn. of mirtazapine. Thus, styrene oxide underwent addn. reaction with N-methylethanolamine in DMF at 80.degree. for 3 h to give a soln. of N-(2-hydroxyethyl)-N-methyl-2-hydroxy-2-phenylethylamine which was treated dropwise with a soln. of SOCl2 in

toluene at 0-25.degree., stirred at 45-55.degree. for 2 h, cooled to .ltoreq.25.degree., and treated dropwise with water and then with 30 wt.% NaOH at 20-25.degree. to give, after workup, a toluene soln. of N-(2-chloroethyl)-N-methyl-2-chloro-2-phenylethylamine. The latter soln. was treated HCl(g) at 10-35.degree. and stirred at 20-25.degree. for 2 h to give N-(2-chloroethyl)-N-methyl-2-chloro-2-phenylethylamine hydrochloride which was stirred with a mixt. of Bu4NBr, aq. NH3, toluene, and DMF at 40-44.degree. for 2 h, treated with 25 wt.% NaOH, and stirred at 45-47.degree. for 2 h to give, after workup, 58.7% II. A mixt. of II, III, KI, and Et3N in DMF was stirred at 115-120.degree. for 10 h and then at 135.degree. to distill Et3N, and the stirring was continued at 135-137.degree. for 5 h to give, after workup and salt formation with oxalic acid, 61.9% I.oxalic acid.

IT **5271-27-2P**, Piperazine, 1-methyl-3-phenyl-
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of (methylphenylpiperazinyl)cyanopyridine by chlorination of N-(hydroxyethyl)-N-methylhydroxyphenylethylamine and cyclization to methylphenylpiperazine followed by condensation with chlorocyanopyridine)

RN 5271-27-2 CAPLUS

CN Piperazine, 1-methyl-3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 2000:756684 CAPLUS
DN 133:321901
TI Novel synthesis of piperazine ring
IN Dolitzky, Ben-Zion
PA Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals Usa, Inc.
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000063185	A1	20001026	WO 2000-US9418	20000407
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	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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	EP 1178972	A1	20020213	EP 2000-921933	20000407
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	US 2002035256	A1	20020321	US 2001-939406	20010824
PRAI	US 1999-130048P	P	19990419		
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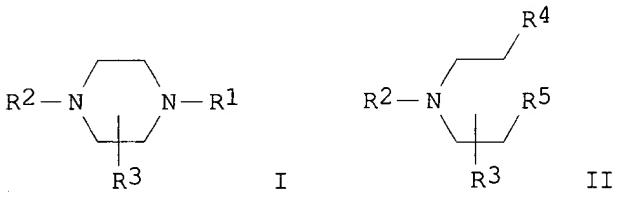
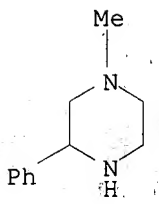
OS CASREACT 133:321901; MARPAT 133:321901
GI



AB A novel process for prepg. the compds I [R1 = (un)subsituted alkyl, alkoxy, aryl, aryloxy, arylalkoxy; R2 = (un)substituted alkyl, alkoxy, aryl, aryloxy, arylalkoxy, tosyl, formyl, acetyl, amino; R3 = (un)substituted alkyl, alkoxy, aryl, aryloxy, arylalkoxy], comprising the step of reacting the compd. II [R4, R5 = F, Cl, Br, I] with H2NR1, is disclosed. The compds. I are useful as intermediates in the synthesis of the antidepressant mirtazapine and other tetracyclic compds.

IT **5271-27-2P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(novel synthesis of piperazine ring)

RN 5271-27-2 CAPLUS
CN Piperazine, 1-methyl-3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)


Me
N
Ph
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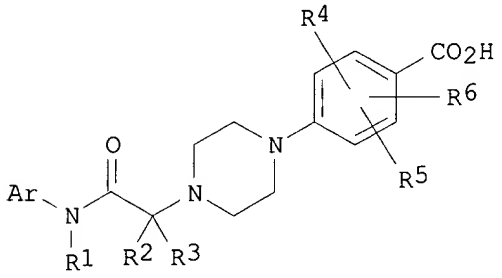
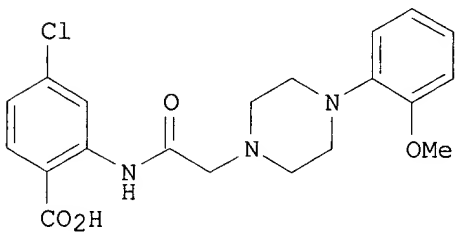
L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1999:404960 CAPLUS
DN 131:58851
TI Piperazine derivatives useful as hypoglycemic agents
IN Bierer, Donald E.; Moinet, Gerard G.; Botton, Gerard; Dubenko, Larisa; Patereau, Gerard; Doare, Liliane; Kergoat, Micheline; Mesangeau, Didier; Lu, Qing
PA Shaman Pharmaceuticals, Inc., USA; Lyonnaise Industrielle Pharmaceutique (LIPHA)
SO PCT Int. Appl., 420 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9931096	A1	19990624	WO 1998-US26851	19981218
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9919240	A1	19990705	AU 1999-19240	19981218
PRAI	US 1997-993320		19971218		
	WO 1998-US26851		19981218		

OS MARPAT 131:58851
GI



I



II

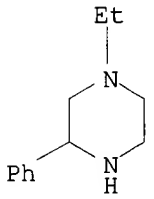
AB A variety of piperazine derivs. useful as antihyperglycemic agents, pharmaceutical compns. comprising them, and methods for their use are described. For example, compds. I are disclosed [wherein Ar = certain mono- and polycyclic aryl and heteroaryl groups; R1, R2, R3 = H, alkyl, alkoxyalkyl, cycloalkyl, aryl, heteroaryl, arylalkoxy, aryloxy, etc.; or

ArNR1 = indolinyl, quinolyl, indolyl, or tetrahydroquinolyl; R4, R5, R6 = H, cycloalkyl, alkyl, alkoxy, halo, CF3, aryl, aryloxy, cyano, CO2H, OH, NH2, NO2, etc.]. The compds. are useful for the treatment of insulin-dependent diabetes mellitus (IDDM or Type I) and non-insulin dependent diabetes mellitus (NIDDM or Type II). For instance, coupling of 4-chloro-2-(chloroacetamido)benzoic acid with 1-(2-methoxyphenyl)piperazine in DMF in the presence of Et3N gave title compd. II. Compds. I gave significant redns. of blood glucose in a variety of animal diabetes models.

IT **5271-30-7**, 1-(3-Ethylphenyl)piperazine
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; prepn. of piperazine derivs. with hypoglycemic activity)

RN 5271-30-7 CAPLUS

CN Piperazine, 1-ethyl-3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

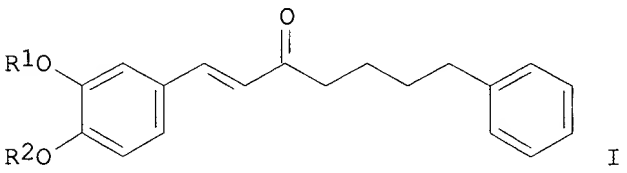


RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

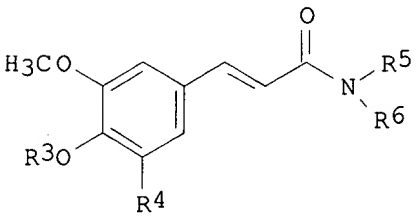
L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1998:599989 CAPLUS
DN 129:286005
TI Phenylpropenones and acyl-CoA:cholesterol transferase inhibitors containing them
IN Sawada, Harushi; Aiyama, Norio; Hatano, Hiroshi; Ooishi, Kenji; Yoshida, Yasuhito; Wada, Yasue; Urakawa, Takako; Mori, Chie; Oowaki, Makoto; Watanabe, Tsuneichi; Yokokura, Teruo
PA Yakult Honsha Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 42 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10245357	A2	19980914	JP 1997-47760	19970303
WO 9839280	A1	19980911	WO 1998-JP867	19980303
W: AU, BR, CA, CN, KR, NO, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9861193	A1	19980922	AU 1998-61193	19980303
AU 733006	B2	20010503		
EP 974573	A1	20000126	EP 1998-905736	19980303
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI JP 1997-47760	A	19970303		
WO 1998-JP867	W	19980303		

OS MARPAT 129:286005
GI



I



II

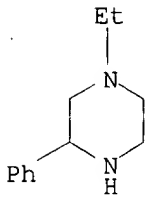
AB Title inhibitors, useful as hypocholesteremics, fatty liver inhibitors, and antiarteriosclerotics, contain phenylpropenones I or II [R1-R3 = H, Ph, aralkyl, (un)satd. linear or branched hydrocarbyl; R4 = H, halo, lower (halo)alkyl, lower alkoxy, Ph, aralkyl, NO2; R5 = H; R6 = (substituted) Ph, (substituted) aralkyl, (substituted) aralkylpiperidino, (substituted) anilinocarbonylmethyl; R5R6 may form piperazine ring]. N-[4-(3,4-dimethylphenyl)-1,4-diazacyclohexyl]-(2E)-3-(3,5-dimethoxy-4-hydroxyphenyl)-2-propenamide (3.00 g) was treated with NaH followed by 1.62 g 1-bromohexane in DMF at room temp. for 7 days to give 1.18 g N-[4-(3,4-dimethylphenyl)-1,4-diazacyclohexyl]-(2E)-3-(3,5-dimethoxy-4-hexyloxyphenyl)-2-propenamide, which in vitro inhibited ACAT-mediated

cholesterol esterification with IC50 of 54 nM. Formulation examples are given.

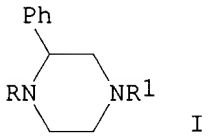
IT **5271-30-7**, 1-(3-Ethylphenyl)piperazine
RL: RCT (Reactant)
(prepn. of phenylpropenones as acyl-CoA:cholesterol transferase inhibitors)

RN 5271-30-7 CAPLUS

CN Piperazine, 1-ethyl-3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

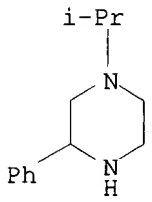


L4 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1994:217550 CAPLUS
DN 120:217550
TI Synthesis of 1-alkyl-2-(or 3-)phenylpiperazines
AU Tkaczynski, Tadeusz; Winiarski, Zdzislaw
CS Dep. Chem. Technol. Pharm. Prod., Sch. Med., Lublin, 20081, Pol.
SO Acta Pol. Pharm. (1992), 49(3), 53-4
CODEN: APPHAX; ISSN: 0001-6837
DT Journal
LA Polish
OS CASREACT 120:217550
GI



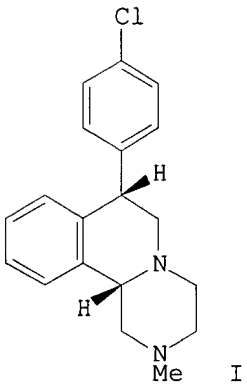
I

AB Reducing 2-phenyl-1-methylpiperazin-5-one with LiAlH4 gave 94% 2-phenyl-1-methylpiperazine (I; R = Me, R1 = H), which was also prepd. (75% yield) by hydrogenolysis of 4-benzyl-1-methyl-2-phenylpiperazine at 8 atm over Pd/C. The latter method was also used to prep. I (R = H, R1 = Me2CH) in 62% yield. I were characterized as their HCl salts.
IT **115238-00-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 115238-00-1 CAPLUS
CN Piperazine, 1-(1-methylethyl)-3-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



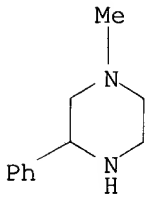
2 HCl

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1989:477964 CAPLUS
DN 111:77964
TI New atypical antidepressants: an efficient process for preparing cis-1,3,4,6,7,11b-hexahydro-2-methyl-7-aryl-2H-pyrazino[2,1-a]isoquinolines
AU Schmiesing, Richard J.; Matz, James R.
CS Pharm. Div., Pennwalt Corp., Rochester, NY, 14603, USA
SO Heterocycles (1989), 29(2), 359-63
CODEN: HTCYAM; ISSN: 0385-5414
DT Journal
LA English
OS CASREACT 111:77964
GI



I

AB Pyrazinoisoquinoline deriv. I was prepd. by a multistep procedure starting from 3-phenyl-2-piperazinone.
IT **118654-15-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and acylation of, with chlorophenacyl bromide)
RN 118654-15-2 CAPLUS
CN Piperazine, 1-methyl-3-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

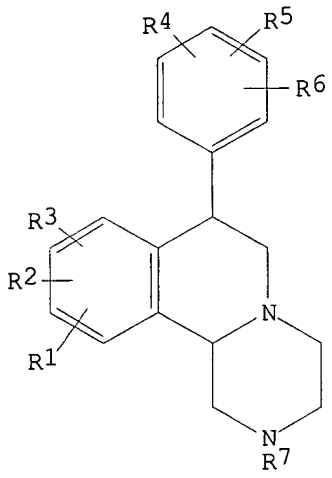


2 HCl

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1989:75567 CAPLUS
DN 110:75567
TI Processes for the preparation of trans-1,3,4,6,7,11b-hexahydro-7-aryl-2H-pyrazino[2,1-a]isoquinolines as antidepressants, antihistaminics, and cholinergics
IN Schmiesing, Richard J.
PA Pennwalt Corp., USA
SO U.S., 9 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4772705	A	19880920	US 1985-759022	19850725
EP 300074	A1	19890125	EP 1987-110639	19870722
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
PRAI US 1985-759022		19850725		

OS CASREACT 110:75567; MARPAT 110:75567
GI



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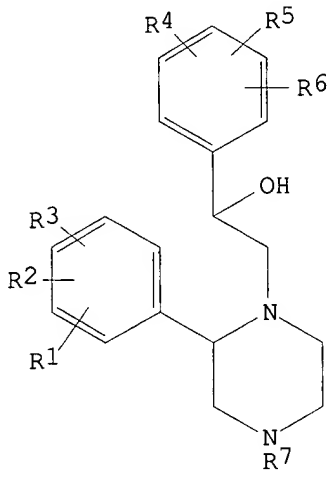
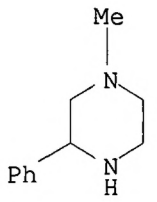


II

AB The title compds. I (R1-R3 = H, halo, OH, amino, lower aminoalkyl, CF3, etc.; R4-R6 = H, halo, OH, NO2, amino, lower aminoalkyl, etc.; R7 = H, lower alkyl), useful as antidepressants, antihistaminics, and cholinergics (no data) were prepd. from phenylpiperazines II. N-Alkylation of 3-phenyl-2-piperazinone (prepn. given) with 4-chlorophenacyl bromide, followed by redn., cyclization in H2SO4, and workup, gave trans-1,3,4,6,7,11b-hexahydro-7-(4-chlorophenyl)-2H-pyrazino[2,1-a]isoquinoline-2HCl.

IT **118654-15-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of antidepressant, antihistaminic, and cholinergic)
RN 118654-15-2 CAPLUS
CN Piperazine, 1-methyl-3-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

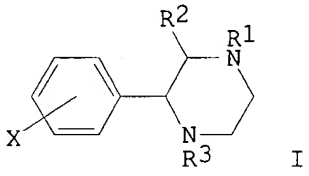


2 HCl

L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1988:437834 CAPLUS
DN 109:37834
TI Preparation of phenylpiperazines as antidepressants and sedatives
IN Lafon, Louis
PA Laboratoire L. Lafon, Fr.
SO Fr. Demande, 33 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2585702	A1	19870206	FR 1985-11684	19850731
	FR 2585702	B1	19890303		
	EP 211746	A1	19870225	EP 1986-401644	19860723
	EP 211746	B1	19900523		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	AT 53026	E	19900615	AT 1986-401644	19860723
	DK 8603602	A	19870201	DK 1986-3602	19860729
	DK 165876	B	19930201		
	DK 165876	C	19930621		
	AU 8660691	A1	19870205	AU 1986-60691	19860730
	AU 580179	B2	19890105		
	ZA 8605685	A	19870325	ZA 1986-5685	19860730
	JP 62029576	A2	19870207	JP 1986-181806	19860731
	JP 07030047	B4	19950405		
	CA 1263392	A1	19891128	CA 1986-515056	19860731
	US 4912110	A	19900327	US 1988-283736	19881213
PRAI	FR 1985-11684		19850731		
	EP 1986-401644		19860723		
	US 1986-891298		19860731		

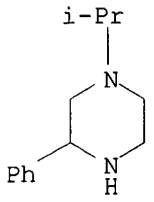
OS CASREACT 109:37834
GI



I

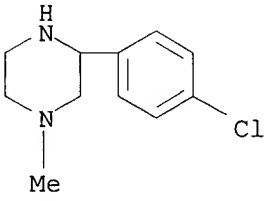
AB The title compds. [I; R1 = H, C1-4 alkyl; R2 = H, Cl, C2 alkyl; R3 = H, C1-4 alkyl; X = H, F, Cl, Br] and their salts, useful as antidepressants and sedatives, are prepd. A mixt. of PhCOCOMe and NH2CH2CH2NH2 (II) in MeOH was allowed to react for 0.5 h and then cooled in an ice bath, NaBH4 was added, and the reaction mixt. was allowed to react overnight to give, after treatment with 3N HCl, 36% I (R1 = R3 = X = H, R2 = Me).2HCl (III). III and I (R1 = Et, R2 = R3 = H, X = 2-Cl) showed antidepressant and sedative effects in mice in extensive pharmacol. studies.

IT **115238-00-1P 115238-04-5P 115238-07-8P**
115238-08-9P 115238-09-0P 115238-10-3P
115238-11-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as antidepressant and sedative)
RN 115238-00-1 CAPLUS
CN Piperazine, 1-(1-methylethyl)-3-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



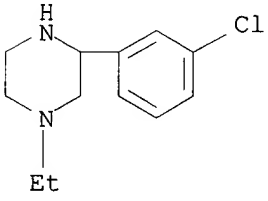
●2 HCl

RN 115238-04-5 CAPLUS
CN Piperazine, 3-(4-chlorophenyl)-1-methyl-, dihydrochloride (9CI) (CA INDEX NAME)



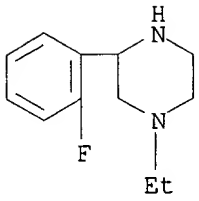
●2 HCl

RN 115238-07-8 CAPLUS
CN Piperazine, 3-(3-chlorophenyl)-1-ethyl-, dihydrochloride (9CI) (CA INDEX NAME)



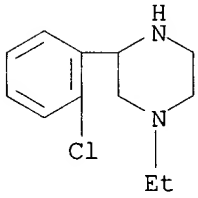
●2 HCl

RN 115238-08-9 CAPLUS
CN Piperazine, 1-ethyl-3-(2-fluorophenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



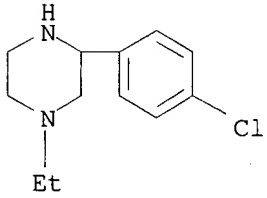
2 HCl

RN 115238-09-0 CAPLUS
CN Piperazine, 3-(2-chlorophenyl)-1-ethyl-, dihydrochloride (9CI) (CA INDEX NAME)



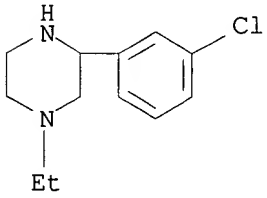
2 HCl

RN 115238-10-3 CAPLUS
CN Piperazine, 3-(4-chlorophenyl)-1-ethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

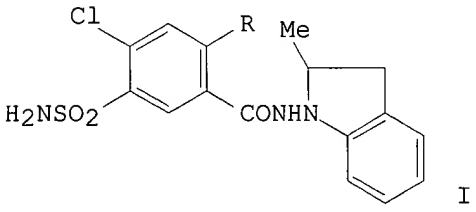
RN 115238-11-4 CAPLUS
CN Piperazine, 3-(3-chlorophenyl)-1-ethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1983:558248 CAPLUS
DN 99:158248
TI Sulfamoylbenzoic acid derivatives
PA Mitsui Toatsu Chemicals, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 58118567	A2	19830714	JP 1982-617	19820107
JP 03060820	B4	19910917		

OS CASREACT 99:158248
GI

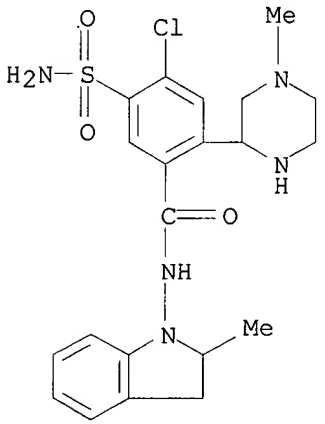


I

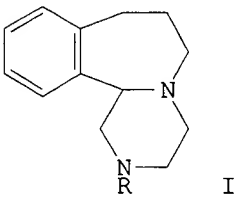
AB The title compds. [I, R = (substituted) piperidinyl, morpholinyl, piperazinyl] were prepd. by condensation of I (R = Cl) (II) with the appropriate heterocycles. Thus, heating 2 g II with 15 mL morpholine at 70.degree. for 1.5 h gave 1.4 g I (R = 2-morpholinyl). I at 30 mg/kg/day decreased systolic blood pressure in rat by 6-25% in 5 days.

IT **87384-92-7P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and antihypertensive activity of)

RN 87384-92-7 CAPLUS
CN Benzamide, 5-(aminosulfonyl)-4-chloro-N-(2,3-dihydro-2-methyl-1H-indol-1-yl)-2-(4-methyl-2-piperazinyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1977:453214 CAPLUS
DN 87:53214
TI Agents acting on the central nervous system: Part XXV. 2-Substituted 1,2,3,4,6,7,8,12b-octahydropyrazino[2,1-a][2]benzazepines
AU Dixit, V. M.; Khanna, J. M.; Anand, Nitya
CS Med. Chem. Div., Cent. Drug Res. Inst., Lucknow, India
SO Indian J. Chem., Sect. B (1976), 14B(11), 874-8
CODEN: IJSBDB
DT Journal
LA English
GI

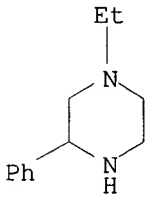


I

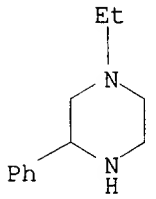
AB 3-Oxo-2-phenylpiperazine was treated with BrCH2CH2COCl and the 1-(3-bromopropionyl)-3-oxo-2-phenylpiperazine cyclized with AlCl3 followed by LiAlH4 redn. to give the pyrazinobenzazepine I (R = H), which was alkylated to give I [R = PhCH2CH2, PhCH(OH)CH2, 4-pyridylethyl, p-FC6H4CO(CH2)3, CH2CN, MeCO(CH2)2, 4,5-dihydro-2-imidazolylmethyl]. I (R = H) had trans stereochem.

IT **5271-30-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction with methyl acrylate)

RN 5271-30-7 CAPLUS
CN Piperazine, 1-ethyl-3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1976:4904 CAPLUS
DN 84:4904
TI N-Alkylation of secondary amines with esters and lithium alanate (lithium aluminum hydride)
AU Khanna, J. M.; Dixit, V. M.; Anand, Nitya
CS Med. Chem. Div., Cent. Drug Res. Inst., Lucknow, India
SO Synthesis (1975), (9), 607-8
CODEN: SYNTBF
DT Journal
LA English
AB 1-Phenyl-, 2-phenyl-, 1-methylpiperazine, piperidine, and PhCH2NHMe were N-alkylated by reaction with RCO2Et (R = H, Me, Et) and LiAlH4 in THF or ether. Thus, reaction of 1-phenylpiperazine with HCO2Et and LiAlH4 gave 4-methyl-1-phenylpiperazine in 90% yield. 2-Phenylpiperazine with AcOEt and LiAlH4 gave 80% 4-ethyl-2-phenylpiperazine. A mechanism, involving initial carboxamide formation and its LiAlH4 redn. to the tertiary amine, was suggested.
IT **5271-30-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 5271-30-7 CAPLUS
CN Piperazine, 1-ethyl-3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                        54.65     195.52

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                        -7.43      -7.43

FILE 'CAOLD' ENTERED AT 12:53:42 ON 16 APR 2002
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FILE COVERS 1907-1966
FILE LAST UPDATED:  01 May 1997 (19970501/UP)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.  Title keywords, authors, patent
  assignees, and patent information, e.g., patent numbers, are
  now searchable from 1907-1966.  TIFF images of CA abstracts
  printed between 1907-1966 are available in the PAGE
  display formats.

  This file supports REG1stRY for direct browsing and searching of
  all substance data from the REGISTRY file.  Enter HELP FIRST for
  more information.

=> s l3
L5            1 L3

=> d l5 bib abs
'ABS' IS NOT A VALID FORMAT FOR FILE 'CAOLD'

The following are valid formats:

ALL ----- AN, TI, AU, PA, DT, IT, PI (default)
BIB ----- AN, TI, AU, PA, DT, PI
CAN ----- List of CA abstract numbers, no L-number headers
CBIB ---- AN, TI, AU, PA, PI
DALL ---- ALL, delimited (end of each field identified)
IND ----- Indexing data
MAX ----- Same as ALL
SAM ----- TI, IT
SCAN ---- TI, IT (random display, no answer numbers;
          SCAN must be entered on the same line as the DISPLAY,
          e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB

IALL ---- ALL, indented with text labels
IBIB ---- BIB, indented with text labels
ISTD ---- STD, indented with text labels

HIT ----- Fields containing hit terms
HITIND -- IT
HITRN --- HIT RN
HITSTR -- HIT RN, its CA index name and its structure diagram
FHITSTR - First HIT RN, its CA index name and its structure diagram
OCC ----- Number of occurrence of hit term and fie ld in which it occurs

Index Terms (IT) are CAS Registry Numbers; Accession
Numbers (AN) CA References.

Index Terms in CAOLD include only Registry Numbers; no
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subject terms are available. The same formats (except SAMPLE) may be used with the DISPLAY ACC command to display the record for a specified CAOLD Accession Number.

PAGE ---- Page Image of original Chemical Abstracts issue containing the abstract of the answer.
PAGE.PREV and PAGE.NEXT will return the image of the page before or after the current answer.
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'D' IS NOT A VALID FORMAT FOR FILE 'CAOLD'
'L5' IS NOT A VALID FORMAT FOR FILE 'CAOLD'

The following are valid formats:

ALL ----- AN, TI, AU, PA, DT, IT, PI (default)
BIB ----- AN, TI, AU, PA, DT, PI
CAN ----- List of CA abstract numbers, no L-number headers
CBIB ---- AN, TI, AU, PA, PI
DALL ---- ALL, delimited (end of each field identified)
IND ----- Indexing data
MAX ----- Same as ALL
SAM ----- TI, IT
SCAN ---- TI, IT (random display, no answer numbers; SCAN must be entered on the same line as the DISPLAY, e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB

IALL ---- ALL, indented with text labels
IBIB ---- BIB, indented with text labels
ISTD ---- STD, indented with text labels

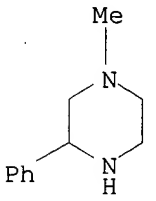
HIT ----- Fields containing hit terms
HITIND -- IT
HITRN --- HIT RN
HITSTR -- HIT RN, its CA index name and its structure diagram
FHITSTR - First HIT RN, its CA index name and its structure diagram
OCC ----- Number of occurrence of hit term and fie ld in which it occurs

Index Terms (IT) are CAS Registry Numbers; Accession Numbers (AN) CA References.

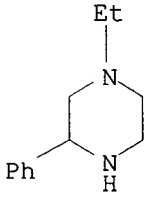
Index Terms in CAOLD include only Registry Numbers; no subject terms are available. The same formats (except SAMPLE) may be used with the DISPLAY ACC command to display the record for a specified CAOLD Accession Number.

PAGE ---- Page Image of original Chemical Abstracts issue containing the abstract of the answer.
PAGE.PREV and PAGE.NEXT will return the image of the page before or after the current answer.
ENTER DISPLAY FORMAT (ALL):ibib hitstr

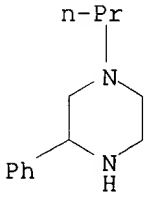
L5 ANSWER 1 OF 1 CAOLD COPYRIGHT 2002 ACS
ACCESSION NUMBER: CA64:11209a CAOLD
TITLE: synthesis of pyridazine derivs. - (V) syntheses of 10H-pyridazino[3,2-b]quinazolin- 10-one and its derivs. (2)
AUTHOR NAME: Yanai, Mitsuji; Kinoshita, T.; Nakashima, S.
IT **5271-27-2** **5271-30-7** **5368-29-6**
RN 5271-27-2 CAOLD
CN Piperazine, 1-methyl-3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 5271-30-7 CAOLD
CN Piperazine, 1-ethyl-3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 5368-29-6 CAOLD
CN Piperazine, 3-phenyl-1-propyl- (7CI, 8CI) (CA INDEX NAME)



=> d l5 can cbib
CA64:11209a

L5 ANSWER 1 OF 1 CAOLD COPYRIGHT 2002 ACS
CA64:11209a synthesis of pyridazine derivs. - (V) syntheses of 10H-pyridazino[3,2-b]quinazolin- 10-one and its derivs. (2). Yanai, Mitsuji; Kinoshita, T.; Nakashima, S.

=> d l5 all

L5 ANSWER 1 OF 1 CAOLD COPYRIGHT 2002 ACS
AN CA64:11209a CAOLD
TI synthesis of pyridazine derivs. - (V) syntheses of 10H-pyridazino[3,2-b]quinazolin- 10-one and its derivs. (2)
AU Yanai, Mitsuji; Kinoshita, T.; Nakashima, S.
IT **5271-27-2** 5271-28-3 5271-29-4 **5271-30-7**
5271-31-8 5271-32-9 5368-20-7 5368-21-8 5368-22-9 5368-23-0
5368-24-1 5368-25-2 5368-28-5 **5368-29-6** 5368-30-9
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5584-96-3

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L2          12302 SEA FILE=REGISTRY SSS FUL L1
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L4           1353 S L2/P
L5            364 S L4 AND US/PC

     FILE 'REGISTRY' ENTERED AT 08:16:39 ON 15 JUN 2000
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L7             STR L1
L8             STR L1
L9            50 S L8
L10            STR L8
L11           50 S L10
L12         2679 S L10 FUL
L13            STR L10
L14            STR L10
L15           50 S L14
L16        12609 S L14 FUL
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     FILE 'HCAPLUS' ENTERED AT 08:37:07 ON 15 JUN 2000
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L18          1412 S L16(L)REACT?/RL
L19            18 S L17 AND L18
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L20          SEL L19 1- RN :    2850 TERMS
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L21          2849 S L20
L22          2626 S L21 AND N/ELS

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     FILE 'CAOLD' ENTERED AT 08:42:24 ON 15 JUN 2000

     FILE 'CASREACT' ENTERED AT 08:49:53 ON 15 JUN 2000
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L25           0 S L24
                  Searched by John Dantzman   703-308-4488
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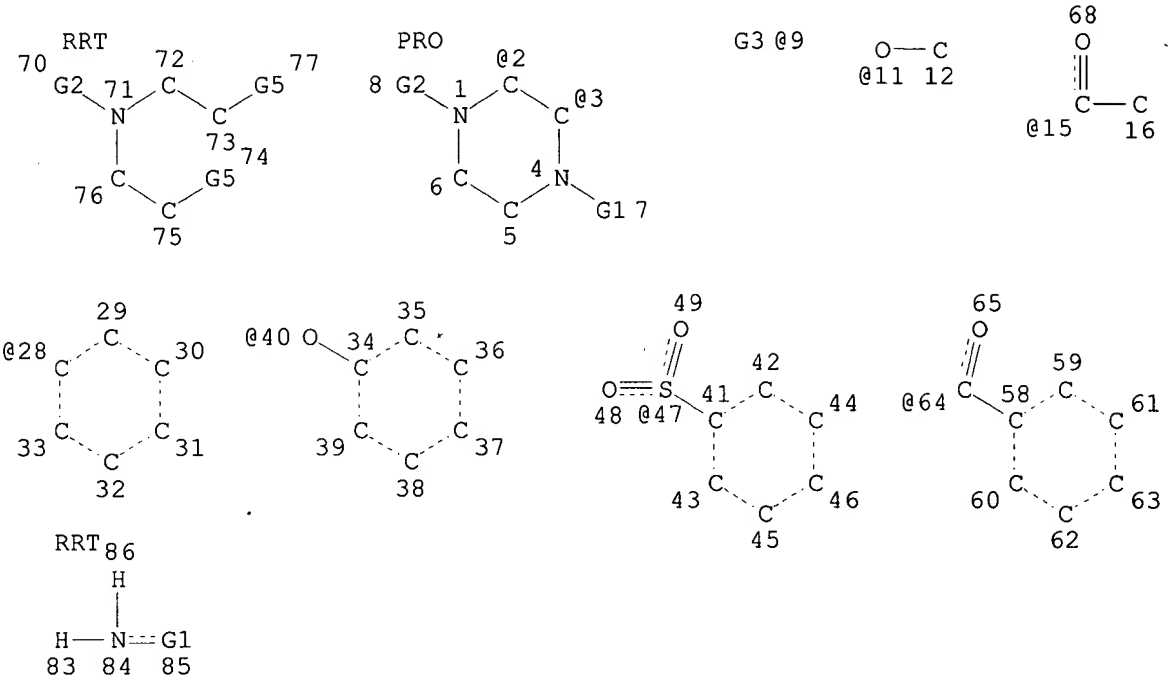
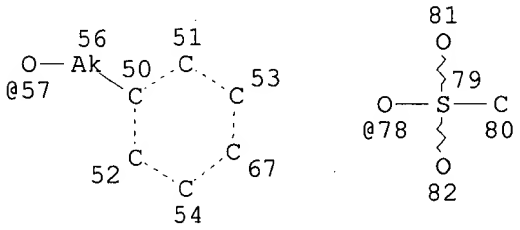


Page 1-A



Page 2-A
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VAR G3=C/11/28/40/57
VAR G5=X/78
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CONNECT IS E3 RC AT 1
CONNECT IS E3 RC AT 4
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DEFAULT ECLEVEL IS LIMITED
ECOUNT IS UNLIMITED AT 67

GRAPH ATTRIBUTES:

RSPEC 4
NUMBER OF NODES IS 69

STEREO ATTRIBUTES: NONE

******MAPPINGS******

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4	N	PRO	84	N	RRT
71	N	RRT	1	N	PRO
84	N	RRT	4	N	PRO

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L2         12302 SEA FILE=REGISTRY SSS FUL L1
              ---------

     FILE 'CAPLUS' ENTERED AT 08:11:02 ON 15 JUN 2000
L3          2469 S L2
L4          1353 S L2/P
L5           364 S L4 AND US/PC

     FILE 'REGISTRY' ENTERED AT 08:16:39 ON 15 JUN 2000
L6             STR
L7             STR L1
L8             STR L1
L9            50 S L8
L10            STR L8
L11           50 S L10
L12         2679 S L10 FUL
L13            STR L10
L14            STR L10
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L16        12609 S L14 FUL
               SAV TEMP L16 BERNPCTB/A

     FILE 'CAPLUS' ENTERED AT 08:35:43 ON 15 JUN 2000

     FILE 'HCAPLUS' ENTERED AT 08:37:07 ON 15 JUN 2000
L17         1353 S L2/P
L18         1412 S L16(L)REACT?/RL
L19           18 S L17 AND L18
               SELECT RN L19 1-18

     FILE 'REGISTRY' ENTERED AT 08:38:23 ON 15 JUN 2000

     FILE 'HCAPLUS' ENTERED AT 08:38:26 ON 15 JUN 2000
               SET SMARTSELECT ON
L20          SEL L19 1- RN :    2850 TERMS
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     FILE 'REGISTRY' ENTERED AT 08:38:34 ON 15 JUN 2000
L21         2849 S L20
L22         2626 S L21 AND N/ELS

     FILE 'HCAPLUS' ENTERED AT 08:39:53 ON 15 JUN 2000

     FILE 'CAOLD' ENTERED AT 08:42:24 ON 15 JUN 2000

     FILE 'CASREACT' ENTERED AT 08:49:53 ON 15 JUN 2000
L23            STR L1
L24            STR L1
L25          0 S L24
                  Searched by John Dantzman   703-308-4488
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L26             0 S L24 FUL
                  SAV TEMP L26 BERNPCTCX/A

     FILE 'CAPLUS' ENTERED AT 09:03:08 ON 15 JUN 2000

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L27               STR L24
L28             0 S L27 FUL
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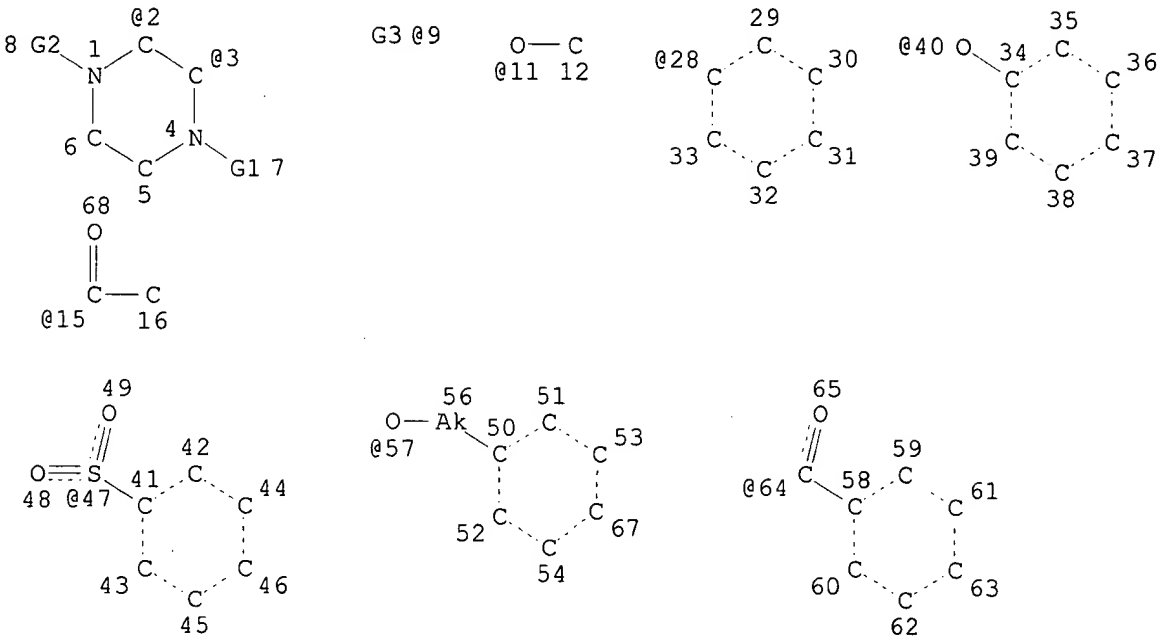

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=> d que l16
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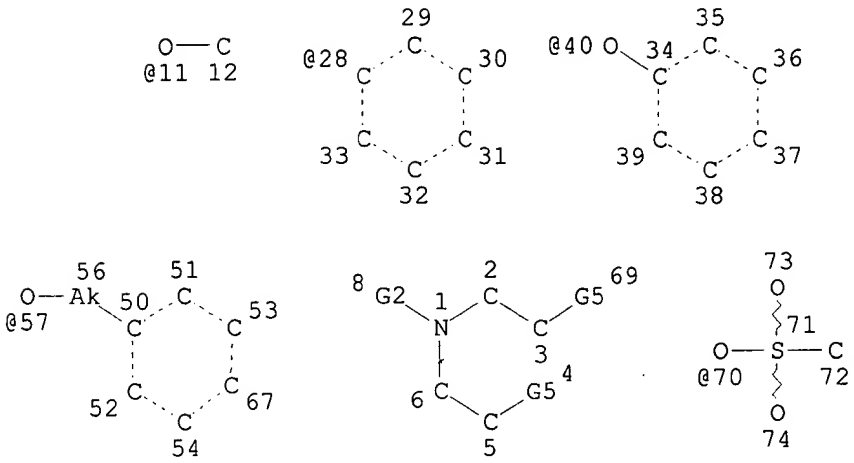

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 36

STEREO ATTRIBUTES: NONE
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=> d l19 bib abs hitstr

L19 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1999:791870 HCAPLUS
DN 132:36535
TI Polymer compositions stabilized by a dioxopiperazinyl derivative
IN Zedda, Alessandro; Zagnoni, Graziano; Sala, Massimiliano; Lazzari, Dario; Andrews, Stephen Mark
PA Ciba Specialty Chemicals Holding Inc., Switz.
SO Ger. Offen., 82 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19924984	A1	19991209	DE 1999-19924984	19990531
	NL 1012190	A1	19991203	NL 1999-1012190	19990531
	FR 2779150	A1	19991203	FR 1999-6862	19990601
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OS MARPAT 132:36535
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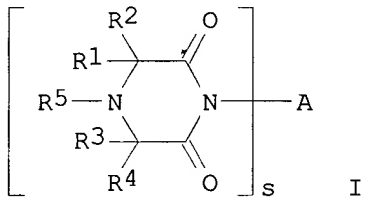

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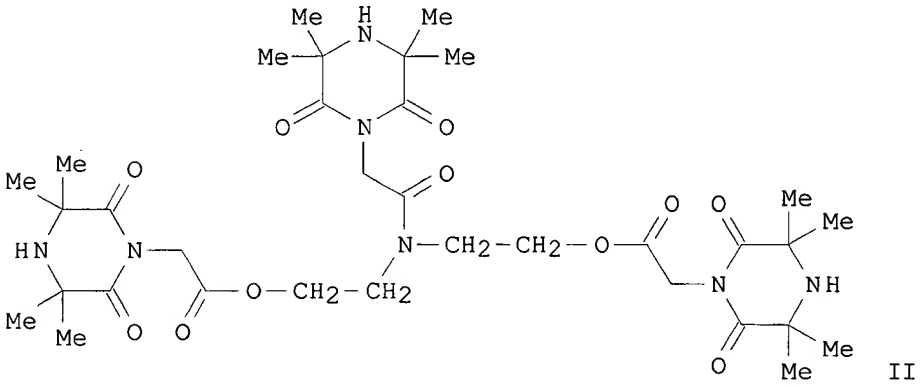
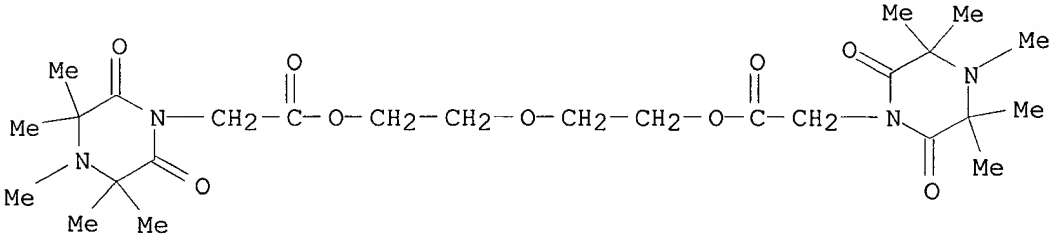


II

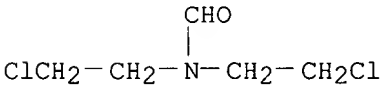
AB The title piperazinyl derivs. [I; R1, R2, R3, R4 = C1-4-alkyl; R1R2 or R3R4 form cyclopentyl or cyclohexyl ring; R5 = H, oxyl, OH, CH2CN, C1-18-alkyl or -alkoxy, C5-12-cycloalkoxy, C3-8-alkenyl or alkynyl,

phenylalkyl (optionally ring-substituted), C1-8-alkanoyl or alkanoyloxy, C3-5-alkenoyl, glycidyl, CH2CH(OH)G; G = H, Me, Ph; A = mono- or polyvalent organocarbyl, including triazine ring-contg. chains with spacer groups for linking to the piperazinyl ring; s = 1-8] are light stabilizers, antioxidants, and/or heat stabilizers for synthetic org. polymers such as polyoxymethylenes, polycarbonate/ABS blends, and acrylic coatings. The stabilizers can be used alone or in combination with other stabilizers. Thus, a gray-pigmented polycarbonate/ABS blend (Cycoloy MC 8002) contg. 0.5% II and 1% (2-hydroxyphenyl)benzotriazole deriv. stabilizer showed 0.5, 3.1, 6.2, and 7.2 units color change after accelerated aging for 94.8, 500.5, 999.7, and 1249.0 h. The color change was less than that obsd. for pigmented blends contg. no stabilizer or contg. the benzotriazole stabilizer alone.

IT **252316-16-8P**
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(in prepn. of dioxopiperazinyl derivs. as stabilizers)
RN 252316-16-8 HCAPLUS
CN 1-Piperazineacetic acid, 3,3,4,5,5-pentamethyl-2,6-dioxo-, oxydi-2,1-ethanediyl ester (9CI) (CA INDEX NAME)



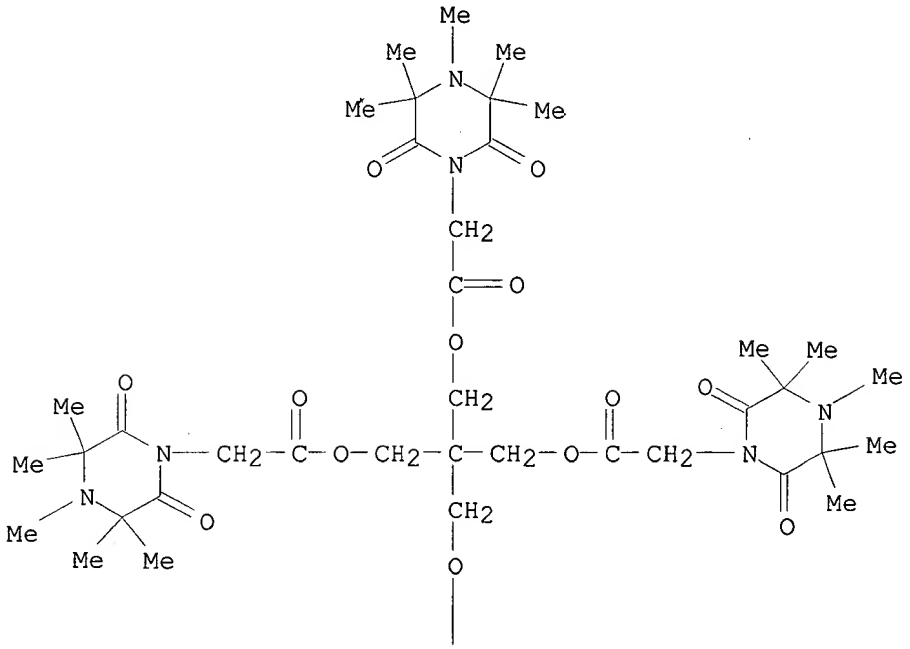
IT **36024-66-5**, N,N-Bis(2-chloroethyl)formamide
RL: **RCT (Reactant)**
(in prepn. of dioxopiperazinyl derivs. as stabilizers)
RN 36024-66-5 HCAPLUS
CN Formamide, N,N-bis(2-chloroethyl)- (6CI, 9CI) (CA INDEX NAME)



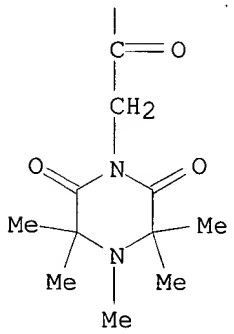
IT **252316-15-7P 252316-17-9P**
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(prepn. of dioxopiperazinyl derivs. as stabilizers for polymers)
RN 252316-15-7 HCAPLUS
CN 1-Piperazineacetic acid, 3,3,4,5,5-pentamethyl-2,6-dioxo-,

2,2-bis[[[(3,3,4,5,5-pentamethyl-2,6-dioxo-1-piperazinyl)acetyl]oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)

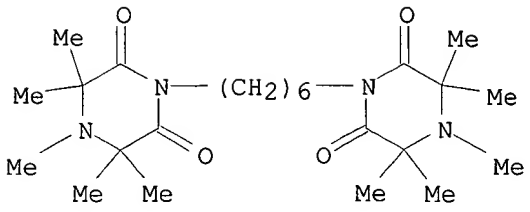
PAGE 1-A



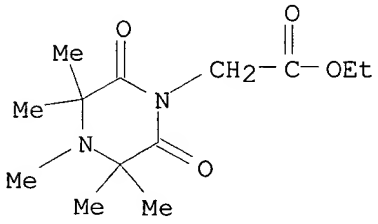
PAGE 2-A



RN 252316-17-9 HCAPLUS
CN 2,6-Piperazinedione, 1,1'-(1,6-hexanediyl)bis[3,3,4,5,5-pentamethyl-(9CI)
(CA INDEX NAME)



IT **252316-14-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of dioxopiperazinyl derivs. as stabilizers for polymers)
RN 252316-14-6 HCAPLUS
CN 1-Piperazineacetic acid, 3,3,4,5,5-pentamethyl-2,6-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



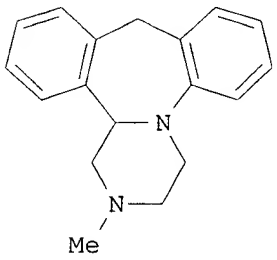
=> d l19 bib abs hitstr 2

L19 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1999:304336 HCAPLUS
DN 130:296698
TI Preparation of 1,2,3,4,10,14b-hexahydro-2-methyldibenzo[c,f]pyrazino[1,2-a]azepine
IN Lypacewicz, Maria K.; Poslinska-bucewka, Halina; Smolinska, Jadwiga; Wasiak, Teresa; Sosinska, Danuta; Mostrak, Magdalena; Trzpil, Barbara; Paszkowski, Slawomir
PA Instytut Farmaceutyczny, Pol.
SO Pol., 6 pp.
CODEN: POXXA7
DT Patent
LA Polish
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 175287	B1	19981231	PL 1994-303650	19940530

OS CASREACT 130:296698
GI

Similar rx to US '513



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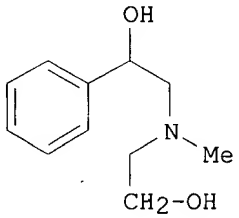
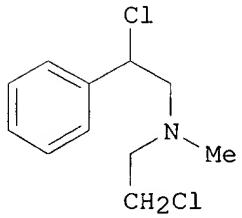
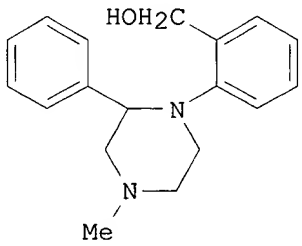


II



III

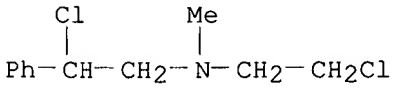


IV

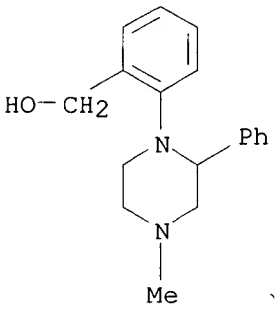
AB The title compd. I, known also as mianserin - antidepressant, was prepd. by reacting styrene oxide with 2-methylaminoethanol followed by treatment of the resulting crude phenylethylamine II with SOCl2, alkylation of o-aminobenzyl alc. with chloride III, and cyclization of piperazine IV with conc. H2SO4.
IT **22270-22-0P 57321-32-1P**
RL: IMF (Industrial manufacture); **RCT (Reactant)**; SPN (Synthetic

preparation); PREP (Preparation)
(prepn. of 1,2,3,4,10,14b-hexahydro-2-methyldibenzo[c,f]pyrazino[1,2-a]azepine)

RN 22270-22-0 HCAPLUS
CN Benzeneethanamine, .beta.-chloro-N-(2-chloroethyl)-N-methyl- (9CI) (CA INDEX NAME)



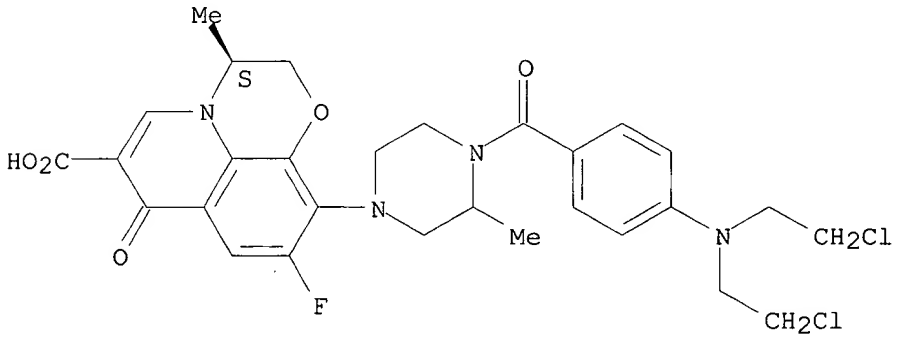
RN 57321-32-1 HCAPLUS
CN Benzenemethanol, 2-(4-methyl-2-phenyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



=> d l19 bib abs hitstr 3

L19 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1999:238028 HCAPLUS
DN 131:110880
TI Synthesis and antibacterial and antitumor activity of -(-)-ofloxacin analogs
AU Yang, Yushe; Ji, Ruyun; Chen, Kaixian; Ding, Jian
CS Shanghai Institute of Materia Medica, Shanghai, 200031, Peop. Rep. China
SO Yaoxue Xuebao (1999), 34(2), 119-124
CODEN: YHHPAL; ISSN: 0513-4870
PB Chinese Academy of Medical Sciences, Institute of Materia Media
DT Journal
LA Chinese
AB The quinolone compds. with antibacterial and antitumor activities were synthesized. According to rational drug design principle, a series of novel analogs of (S)-(-)-ofloxacin were prepd., their in vitro antitumor and antibacterial activities were evaluated, and the structure-activity relationship was discussed. Some compds. showed good antitumor and antibacterial activities.
IT **233603-66-2P 233603-67-3P 233603-71-9P**
233603-72-0P 233603-78-6P 233603-80-0P
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and structure-activity relationship of quinolone compds. as antibacterial and antitumor agents)
RN 233603-66-2 HCAPLUS
CN 7H-Pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid, 10-[4-[4-[bis(2-chloroethyl)amino]benzoyl]-3-methyl-1-piperazinyl]-9-fluoro-2,3-dihydro-3-methyl-7-oxo-, (3S)- (9CI) (CA INDEX NAME)

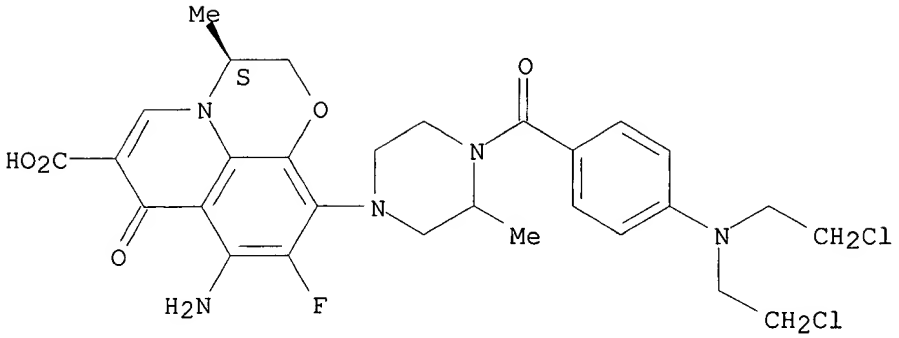
Absolute stereochemistry.



RN 233603-67-3 HCAPLUS
CN 7H-Pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid, 8-amino-10-[4-[4-[bis(2-chloroethyl)amino]benzoyl]-3-methyl-1-piperazinyl]-9-fluoro-2,3-dihydro-3-methyl-7-oxo-, (3S)- (9CI) (CA INDEX NAME)

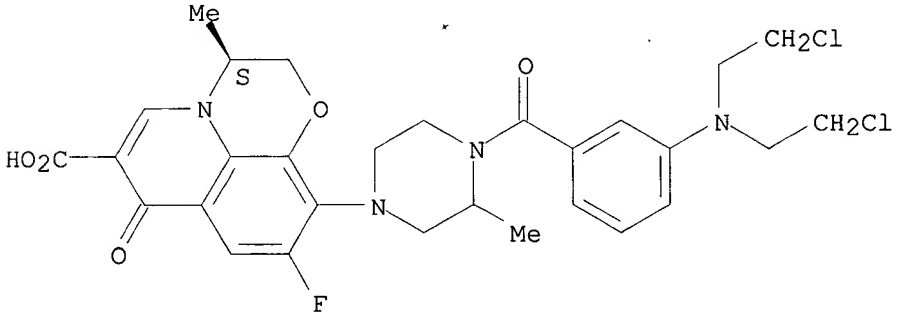
Absolute stereochemistry.

Searched by John Dantzman 703-308-4488



RN 233603-71-9 HCAPLUS
CN 7H-Pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid, 10-[4-[3-[bis(2-chloroethyl)amino]benzoyl]-3-methyl-1-piperazinyl]-9-fluoro-2,3-dihydro-3-methyl-7-oxo-, (3S)- (9CI) (CA INDEX NAME)

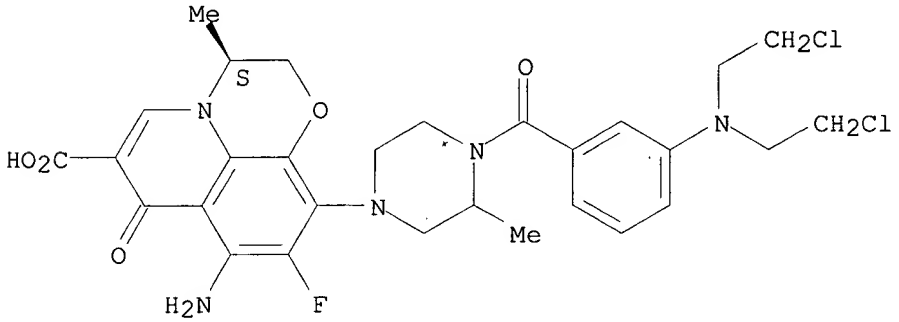
Absolute stereochemistry.



RN 233603-72-0 HCAPLUS
CN 7H-Pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid,

8-amino-10-[4-[3-[bis(2-chloroethyl)amino]benzoyl]-3-methyl-1-piperazinyl]-9-fluoro-2,3-dihydro-3-methyl-7-oxo-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

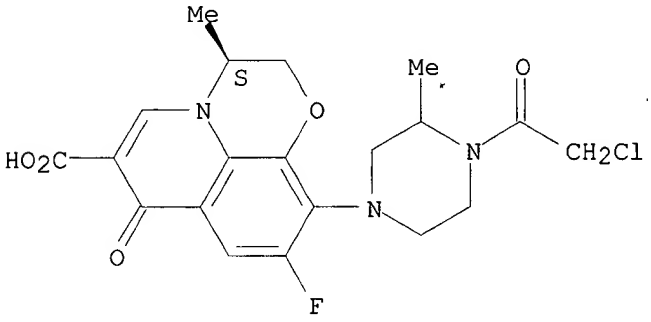


RN 233603-78-6 HCAPLUS

CN 7H-Pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid,

10-[4-(chloroacetyl)-3-methyl-1-piperazinyl]-9-fluoro-2,3-dihydro-3-methyl-7-oxo-, (3S)- (9CI) (CA INDEX NAME)

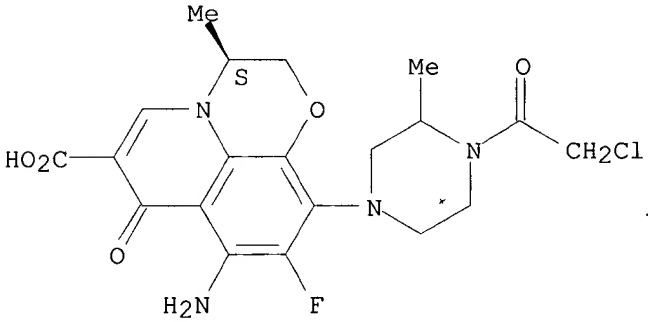
Absolute stereochemistry.



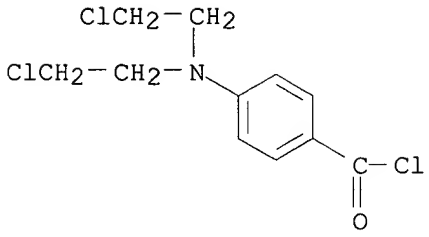
RN 233603-80-0 HCAPLUS
CN 7H-Pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid,

8-amino-10-[4-(chloroacetyl)-3-methyl-1-piperazinyl]-9-fluoro-2,3-dihydro-3-methyl-7-oxo-, (3S)- (9CI) (CA INDEX NAME)

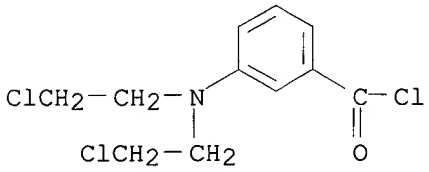
Absolute stereochemistry.



IT **15944-88-4 24813-11-4**
RL: **RCT (Reactant)**
(prepn. and structure-activity relationship of quinolone compds. as antibacterial and antitumor agents)
RN 15944-88-4 HCAPLUS
CN Benzoyl chloride, 4-[bis(2-chloroethyl)amino]- (9CI) (CA INDEX NAME)



RN 24813-11-4 HCAPLUS
CN Benzoyl chloride, 3-[bis(2-chloroethyl)amino]- (9CI) (CA INDEX NAME)



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=> d l19 bib abs hitstr 4

L19  ANSWER 4 OF 18  HCAPLUS  COPYRIGHT 2000 ACS
AN   1999:213401  HCAPLUS
       Correction of: 1997:513626
DN   130:209597
       Correction of: 127:205470
TI   Preparation of heterocyclylhydroxyalkanamides and related compounds as
HIV
     protease inhibitors.
IN   Tung, Roger Dennis; Salituro, Francesco Gerald; Deininger, David D.;
     Bhisetti, Govinda Rao; Baker, Christopher Todd; Spaltenstein, Andrew;
     Kazmierski, Wieslaw M.; Andrews, Clarence Webster III
PA   Vertex Pharmaceuticals Incorporated, USA
SO   PCT Int. Appl., 336 pp
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
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PI   WO 9727180         A1   19970731      WO 1997-US1610   19970122
         W:  AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
     US 5883252          A    19990316      US 1996-592777   19960126
     US 5945413          A    19990831      US 1996-724563   19960930
     AU 9717580          A1   19970820      AU 1997-17580    19970122
     AU 709239           B2   19990826
     EP 882022           A1   19981209      EP 1997-904911   19970122
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     BR 9707086          A    19990413      BR 1997-7086     19970122
     JP 2000501111       T2   20000202      JP 1997-527124   19970122
     NO 9803435          A    19980921      NO 1998-3435     19980724
PRAI US 1996-592777    19960126
     US 1996-724563    19960930
     WO 1997-US1610    19970122
OS   MARPAT 130:209597
GI
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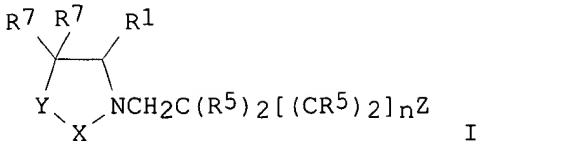

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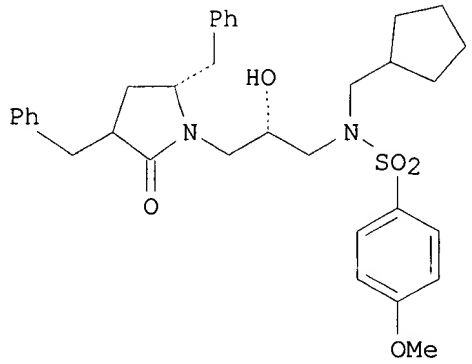


II

AB Title compds. [I; Z = (QR1)R1R4, Q1, etc.; ; X, X1 = CO, CO2, SO, SO2; Y, Y1 = [C(R2)2]p, NR2, C:C(R2)2, NR2CH2, etc.; Q = CH, N; R1, R2 = H, (substituted) alkyl, alkenyl, alkynyl, (fused) cycloalkyl, cycloalkenyl, etc.; R4 = (substituted) OR9, XR9, N(R9)2, R6, alkyl, alkenyl, (fused) cycloalkyl, cycloalkenyl, etc.; R5 = H, OH, O, R1; R6 = (substituted) aryl, carbocyclyl, heterocyclyl; R7 = H, OH, O; R9 = H, alkyl, alkenyl, alkynyl, aryl, carbocyclyl, heterocyclyl, aralkyl, carbocyclylalkyl, heterocyclylalkyl; n = 1, 2; r = 0-2], were prepd. Thus, title compd. (II) (prepn. given) inhibited HIV protease with Ki = 1.5 nM.

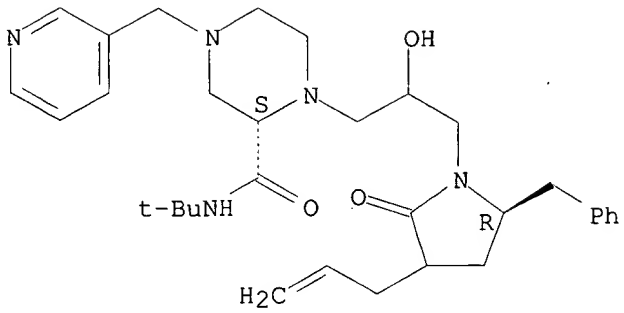
IT **194596-67-3P**

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant);
SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocyclylhydroxyalkanamides and related compds. as HIV protease inhibitors)

RN 194596-67-3 HCAPLUS

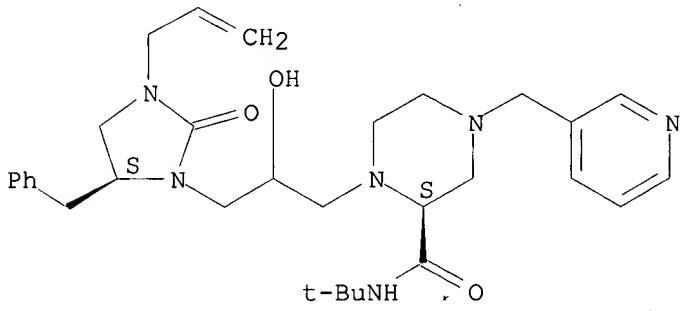
CN 2-Piperazinecarboxamide, N-(1,1-dimethylethyl)-1-[2-hydroxy-3-[(5R)-2-oxo-5-(phenylmethyl)-3-(2-propenyl)-1-pyrrolidinyl]propyl]-4-(3-pyridinylmethyl)-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



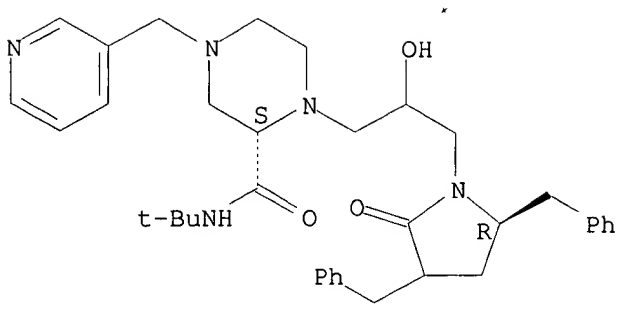
IT **194596-59-3P 194596-96-8P 194597-00-7P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocyclylhydroxyalkanamides and related compds. as HIV protease inhibitors)
RN 194596-59-3 HCAPLUS
CN 2-Piperazinecarboxamide,
N-(1,1-dimethylethyl)-1-[2-hydroxy-3-[(5S)-2-oxo-5-(phenylmethyl)-3-(2-propenyl)-1-imidazolidinyl]propyl]-4-(3-pyridinylmethyl)-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



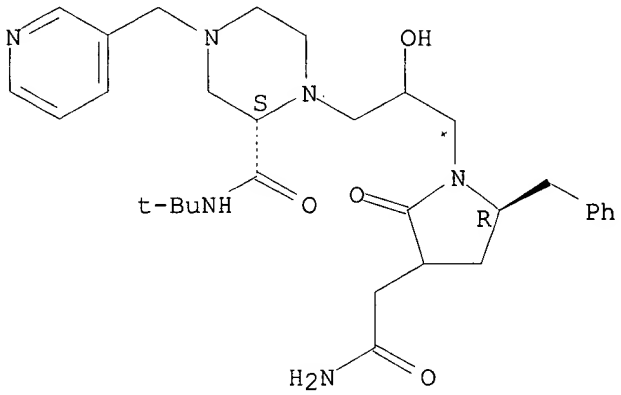
RN 194596-96-8 HCAPLUS
CN 2-Piperazinecarboxamide,
N-(1,1-dimethylethyl)-1-[2-hydroxy-3-[(5R)-2-oxo-3,5-bis(phenylmethyl)-1-pyrrolidinyl]propyl]-4-(3-pyridinylmethyl)-, (2S)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

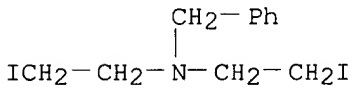


RN 194597-00-7 HCAPLUS
CN 2-Piperazinecarboxamide, 1-[3-[(5R)-3-(2-amino-2-oxoethyl)-2-oxo-5-(phenylmethyl)-1-pyrrolidinyl]-2-hydroxypropyl]-N-(1,1-dimethylethyl)-4-(3-pyridinylmethyl)-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



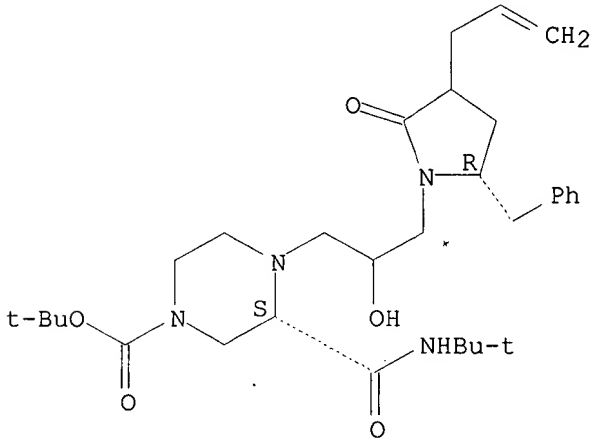
IT **194599-81-0**
RL: **RCT (Reactant)**
(prepn. of heterocyclylhydroxyalkanamides and related compds. as HIV protease inhibitors)
RN 194599-81-0 HCAPLUS
CN Benzenemethanamine, N,N-bis(2-iodoethyl)- (9CI) (CA INDEX NAME)



IT **194598-24-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of heterocyclylhydroxyalkanamides and related compds. as HIV protease inhibitors)
RN 194598-24-8 HCAPLUS
CN 1-Piperazinecarboxylic acid, 3-[[(1,1-dimethylethyl)amino]carbonyl]-4-[2-

hydroxy-3-[(5R)-2-oxo-5-(phenylmethyl)-3-(2-propenyl)-1-pyrrolidinyl]propyl]-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

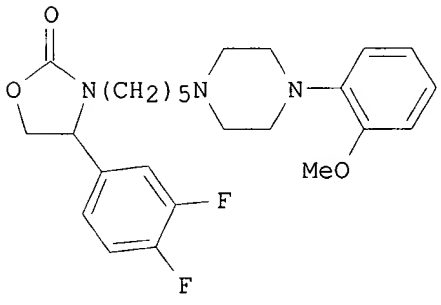


=> d l19 bib abs hitstr 5

L19 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1999:9823 HCAPLUS
DN 130:81508
TI Heterocyclic substituted oxazolidinones for use as selective antagonists for human .alpha.1A receptors
IN Lagu, Bharat; Dhar, T. G. Murali; Nagarathnam, Dhanapalan; Jeon, Yoon T.; Marzabadi, Mohammad R.; Wong, Wai C.; Gluchowski, Charles; Tian, Dake
PA Synaptic Pharmaceutical Corporation, USA
SO PCT Int. Appl., 258 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9857940	A1	19981223	WO 1998-US12668	19980617
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9881498	A1	19990104	AU 1998-81498	19980617
	EP 988295	A1	20000329	EP 1998-931350	19980617
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRAI US 1997-877846 19970618
WO 1998-US12668 19980617
OS MARPAT 130:81508
GI

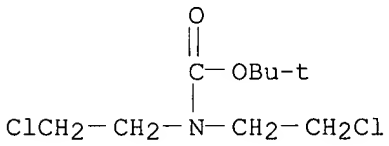


I

AB This invention is directed to oxazolidinone compds. which are selective antagonists for human .alpha.1A receptors. These compds. lower intraocular pressure, inhibit cholesterol synthesis, relax lower urinary tract tissue, and are useful in the treatment of benign prostatic

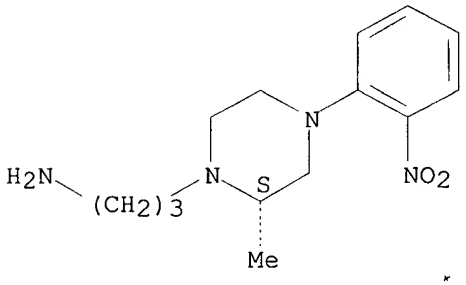
hyperplasia, impotency, cardiac arrhythmia etc. Thus, 4-(3,4-difluorophenyl)oxazolidinone was treated with 1,5-dibromopentane, followed by 1-(2-methoxyphenyl)piperazine to give the oxazolidinone I which had a binding affinity for human .alpha.1A receptors of 0.5 nM.

IT **118753-70-1**
RL: **RCT (Reactant)**
(prepn. of heterocyclic substituted oxazolidinones for use as selective
antagonists for human .alpha.1A receptors)
RN 118753-70-1 HCAPLUS
CN Carbamic acid, bis(2-chloroethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



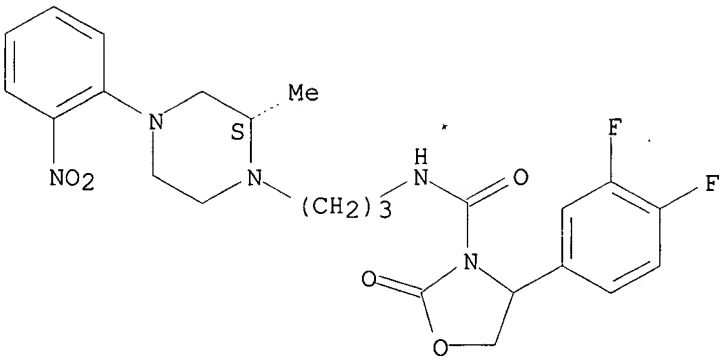
IT **218449-79-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of heterocyclic substituted oxazolidinones for use as selective
antagonists for human .alpha.1A receptors)
RN 218449-79-7 HCAPLUS
CN 1-Piperazinepropanamine, 2-methyl-4-(2-nitrophenyl)-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



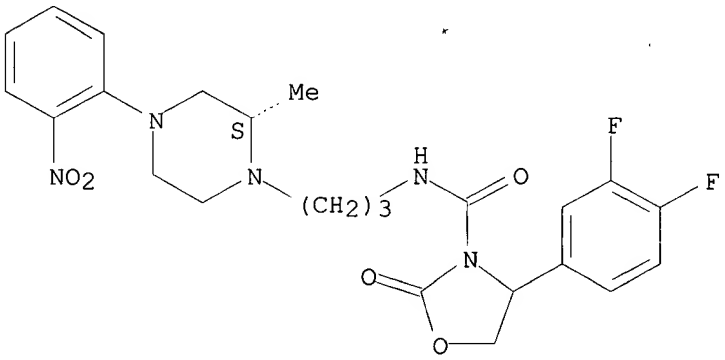
IT **218449-80-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocyclic substituted oxazolidinones for use as selective
antagonists for human .alpha.1A receptors)
RN 218449-80-0 HCAPLUS
CN 3-Oxazolidinecarboxamide, 4-(3,4-difluorophenyl)-N-[3-[(2S)-2-methyl-4-(2-nitrophenyl)-1-piperazinyl]propyl]-2-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **218449-81-1P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocyclic substituted oxazolidinones for use as selective
antagonists for human .alpha.1A receptors)
RN 218449-81-1 HCAPLUS
CN 3-Oxazolidinecarboxamide,
4-(3,4-difluorophenyl)-N-[3-[(2S)-2-methyl-4-(2-nitrophenyl)-1-piperazinyl]propyl]-2-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

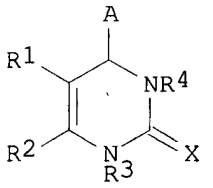
RE.CNT 10
(1) Carling; US 5698573 A 1997
(2) Ishimitsu; US 4882431 A 1989
(3) Joshi, K; J Heterocyclic Chem 1981, V18, P1651 HCAPLUS
(7) Rhone Poulenc; EP 0599749 A1 1994 HCAPLUS
(10) Wright; US 3334098 A 1967 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l19 bib abs hitstr 6

L19 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1998:764290 HCAPLUS
DN 130:25077
TI Preparation of piperidinylpropylaminocarbonyldihydropyrimidones and related compounds as selective adrenergic .alpha.1A receptor antagonists.
IN Wong, Wai C.; Lagu, Bharat; Nagarathnam, Dhanapalan; Marzabadi, Mohammad R.; Gluchowski, Charles
PA Synaptic Pharmaceutical Corporation, USA
SO PCT Int. Appl., 314 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9851311	A2	19981119	WO 1998-US10082	19980515
	WO 9851311	A3	19990114		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9876872	A1	19981208	AU 1998-76872	19980515

PRAI US 1997-858017 19970516
WO 1998-US10082 19980515
OS MARPAT 130:25077
GI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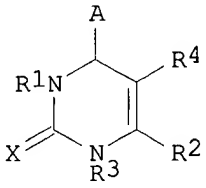
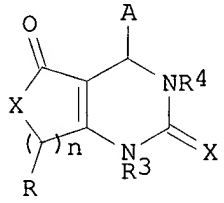

II


III

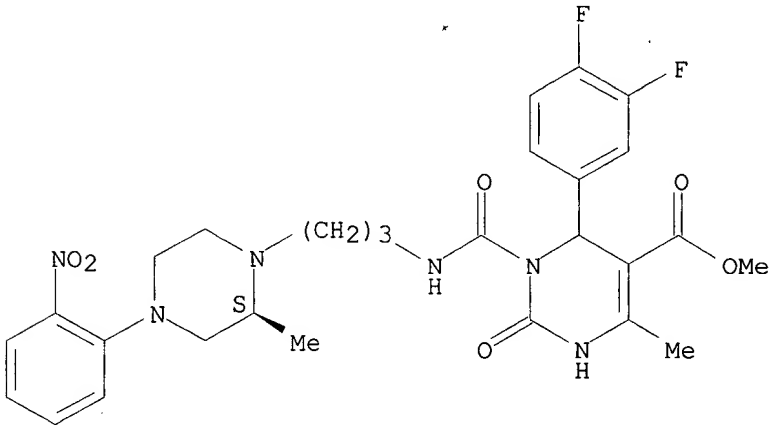
AB Title compds. [I, II, III; A = specified (substituted) (hetero)aryl; X = S, O, NR3; R1 = H, NO2, cyano, alkyl, fluoroalkyl, alkenyl, alkynyl, cycloalkyl, fluorocycloalkyl, cycloalkenyl, N(R3)2, OR3, COR3, CO2R3, CON(R3)2; R2 = H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, fluoroalkyl, alkenyl, alkynyl, cycloalkyl, fluorocycloalkyl, cycloalkenyl, cycloalkylalkyl, cyano, OR3, etc.; R3 = H, alkyl, fluoroalkyl, alkenyl, alkynyl, cycloalkyl, fluorocycloalkyl, cycloalkenyl; R4 = specified substituted heterocyclylpiperidinylalkyl, etc.; n = 0-5], were prepd. I are useful for lowering intraocular pressure, inhibiting cholesterol synthesis, relaxing lower urinary tract tissue, treatment of benign prostatic hyperplasia, impotency, cardiac arrhythmia, etc. Thus,

(+)-5-carboxamido-4-ethyl-1-[N-[3-(4-methoxycarbonyl-4-phenylpiperidin-1-yl)propyl]]carboxamido-6-(4-nitrophenyl)-2-oxo-1,2,3,6-tetrahydropyrimidine (prepn. given) bound to human .alpha.1A receptors with pKi = 9.74.

IT **216310-53-1P 216310-54-2P 216310-55-3P 216310-56-4P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of piperidinylpropylaminocarbonyldihydropyrimidones as selective adrenergic .alpha.1A receptor antagonists)

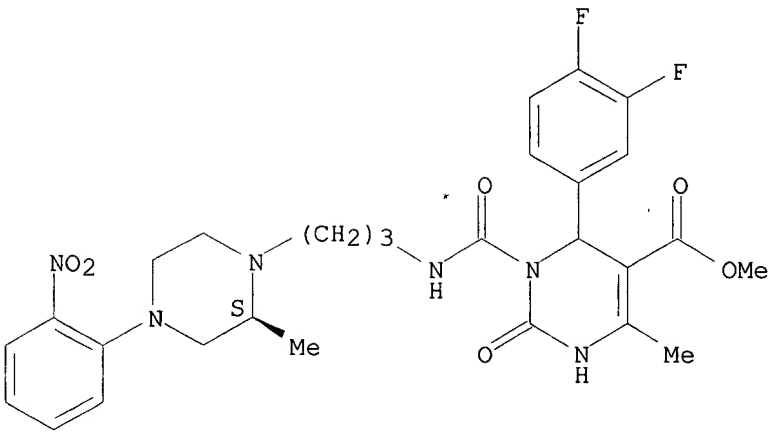
RN 216310-53-1 HCAPLUS
CN 5-Pyrimidinecarboxylic acid, 6-(3,4-difluorophenyl)-1,2,3,6-tetrahydro-4-methyl-1-[[[3-[(2S)-2-methyl-4-(2-nitrophenyl)-1-piperazinyl]propyl]amino]carbonyl]-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 216310-54-2 HCAPLUS
CN 5-Pyrimidinecarboxylic acid, 6-(3,4-difluorophenyl)-1,2,3,6-tetrahydro-4-methyl-1-[[[3-[(2S)-2-methyl-4-(2-nitrophenyl)-1-piperazinyl]propyl]amino]carbonyl]-2-oxo-, methyl ester, monohydrochloride
(9CI) (CA INDEX NAME)

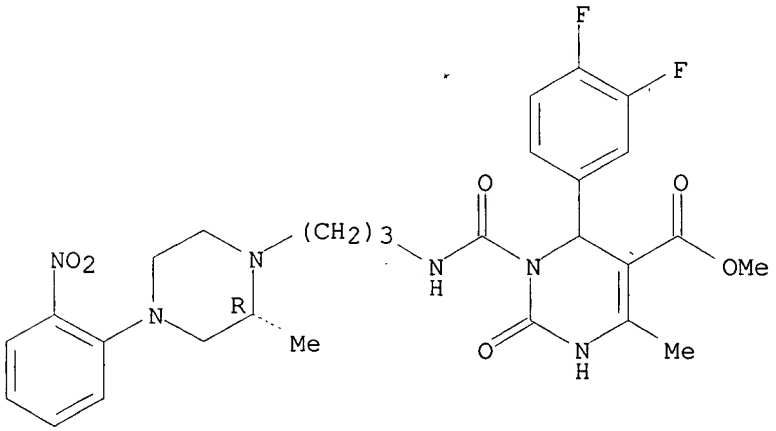
Absolute stereochemistry.



● HCl

RN 216310-55-3 HCAPLUS
CN 5-Pyrimidinecarboxylic acid, 6-(3,4-difluorophenyl)-1,2,3,6-tetrahydro-4-methyl-1-[[[3-[(2R)-2-methyl-4-(2-nitrophenyl)-1-piperazinyl]propyl]amino]carbonyl]-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

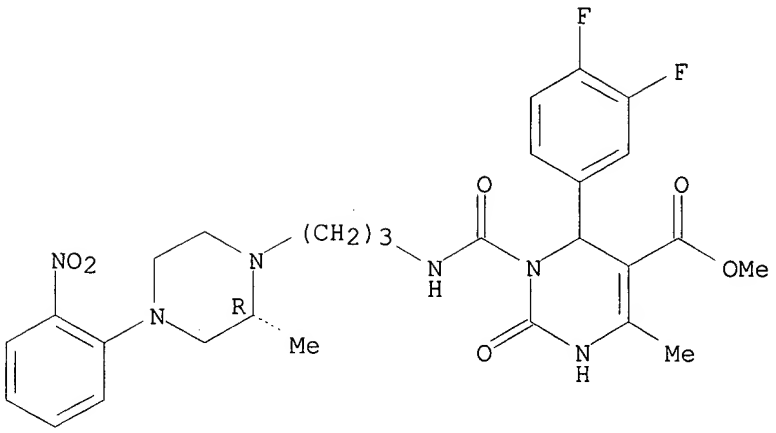
Absolute stereochemistry.



RN 216310-56-4 HCAPLUS
CN 5-Pyrimidinecarboxylic acid, 6-(3,4-difluorophenyl)-1,2,3,6-tetrahydro-4-methyl-1-[[[3-[(2R)-2-methyl-4-(2-nitrophenyl)-1-piperazinyl]propyl]amino]carbonyl]-2-oxo-, methyl ester, monohydrochloride
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

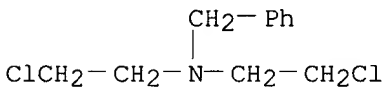
Searched by John Dantzman 703-308-4488



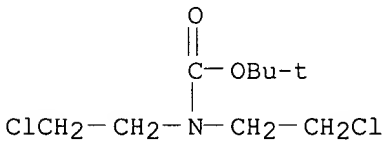
● HCl

IT **55-51-6**, N,N-Bis(2-chloroethyl)benzylamine **118753-70-1**
RL: **RCT (Reactant)**
(prepn. of piperidinylpropylaminocarbonyldihydropyrimidones as selective adrenergic .alpha.1A receptor antagonists)

RN 55-51-6 HCAPLUS
CN Benzenemethanamine, N,N-bis(2-chloroethyl)- (9CI) (CA INDEX NAME)



RN 118753-70-1 HCAPLUS
CN Carbamic acid, bis(2-chloroethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



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L19  ANSWER 7 OF 18  HCAPLUS  COPYRIGHT 2000 ACS
AN   1998:112193  HCAPLUS
DN   128:180426
TI   Preparation of piperazine and piperidine derivatives as muscarinic
     antagonists
IN   Lowe, Derek B.; Chang, Wei K.; Kozlowski, Joseph A.; Berger, Joel G.;
     McQuade, Robert; Barnett, Allen; Sherlock, Margaret; Tom, Wing; Dugar,
     Sundeep; Chen, Lian-yong; Clader, John W.; Chackalamannil, Samuel; Wang,
     Yuguang; McCombie, Stuart W.; Tagat, Jayaram R.; Vice, Susan F.; Vaccaro,
     Wayne D.; Green, Michael J.; Browne, Margaret E.; Asberom, Theodros;
     Boyle, Craig D.; Josien, Hubert B.
PA   Schering Corp., USA
SO   PCT Int. Appl., 156 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.         KIND  DATE          APPLICATION NO.  DATE
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PI   WO 9805292          A2   19980212      WO 1997-US13383  19970806
     WO 9805292          A3   19980402
         W:  AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IL,
             IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO,
             NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
             GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
             GN, ML, MR, NE, SN, TD, TG
     US 5889006          A    19990330      US 1996-700628   19960808
     AU 9738999          A1   19980225      AU 1997-38999    19970806
     EP 938483           A2   19990901      EP 1997-936296   19970806
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
             LT, LV, FI, RO
     BR 9711119          A    19991123      BR 1997-11119    19970806
     JP 2000501117       T2   20000202      JP 1998-508038   19970806
     NO 9900551          A    19990407      NO 1999-551      19990205
PRAI US 1996-700628    19960808
     US 1995-392697    19950223
     US 1995-457712    19950602
     US 1996-602403    19960216
     WO 1997-US13383   19970806
OS   MARPAT 128:180426
GI
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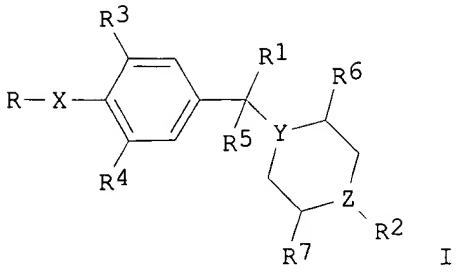


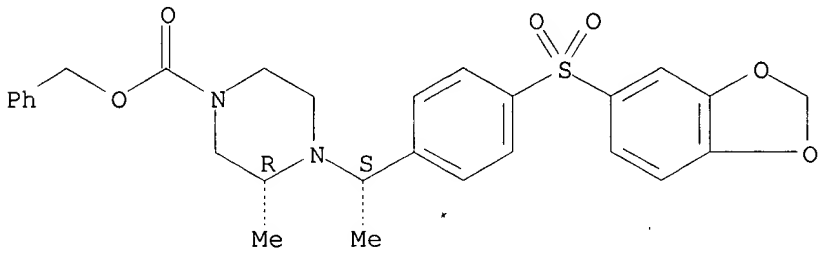
I

AB Title compds. I (R = OH, HOCH2, etc.; R1 = H, alkyl, alkenyl, cyano, etc.;
R2 =H, (un)substituted piperidine; R3 = cycloalkylalkyl, haloacyl, benzyloxalkyl, etc.; R4 = H, halo, alkyl, alkoxy, etc.; R5 = H, alkyl,alkenyl,cyano, etc.; R1-R5 = (un)substituted satd. (hetero)cyclic ring; R6 = H, alkyl, hydroxyalkyl, arylalkyl, aminoalkyl, etc.; R7 = indolylalkyl, carboxyalkyl, etc.; X = O, S, SO, SO2,CO, CS, NHCOO, etc.; RX = I, Br, alkylcarbonyl, etc.; Y = N, CH, C-alkyl; Z = N, CH, C-alkyl), including isomers, salts, esters, and solvates, are prepd. and are defined
muscarinic antagonists useful for treating cognitive disorders such as Alzheimer's disease. Pharmaceutical compns. and methods of prepn. are also disclosed. Also disclosed are synergistic combinations of I with acetylcholinesterase inhibitors.

IT **203180-25-0P 203186-74-7P 203187-02-4P**
203187-63-7P
RL: **RCT (Reactant)**; SPN (Synthetic preparation); PREP (Preparation)
(prepn. of piperazine and piperidine derivs. as muscarinic antagonists)

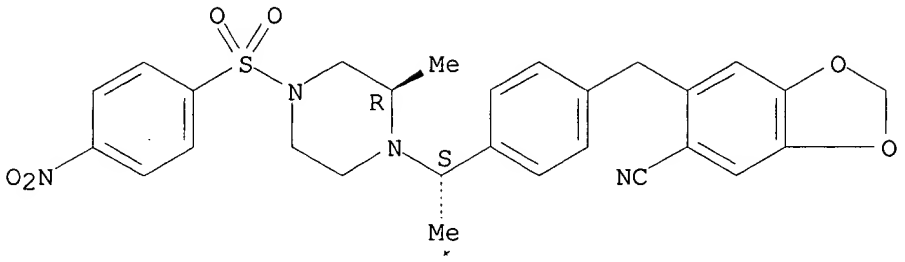
RN 203180-25-0 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(1S)-1-[4-(1,3-benzodioxol-5-ylsulfonyl)phenyl]ethyl]-3-methyl-, phenylmethyl ester, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

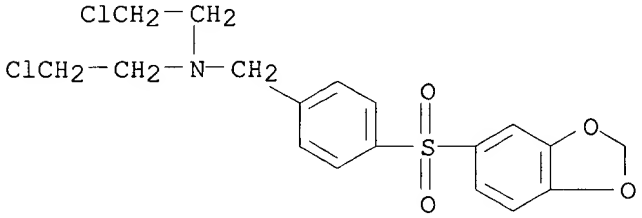


RN 203186-74-7 HCAPLUS
CN Piperazine,
1-[1-[4-[(6-cyano-1,3-benzodioxol-5-yl)methyl]phenyl]ethyl]-2-methyl-4-[(4-nitrophenyl)sulfonyl]-, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

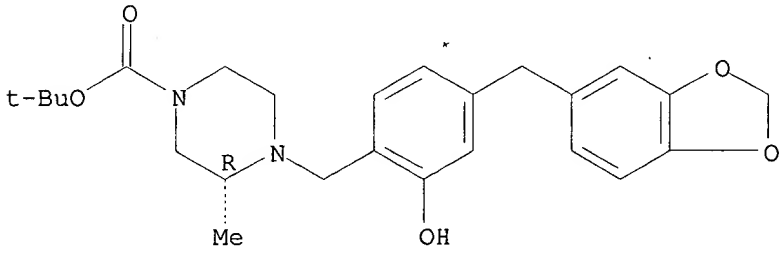


RN 203187-02-4 HCAPLUS
CN Benzenemethanamine, 4-(1,3-benzodioxol-5-ylsulfonyl)-N,N-bis(2-chloroethyl)- (9CI) (CA INDEX NAME)



RN 203187-63-7 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[[4-(1,3-benzodioxol-5-ylmethyl)-2-hydroxyphenyl]methyl]-3-methyl-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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L19 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1997:684389 HCAPLUS
DN 127:358876
TI Preparation of heterocyclylphenoxyalkanoates and analogs as cell aggregation inhibitors
IN Pieper, Helmut; Linz, Gunter; Austel, Volkhard; Himmelsbach, Frank; Guth, Brian; Weisenberger, Johannes
PA Dr. Karl Thomae G.m.b.H., Germany
SO PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9737975	A1	19971016	WO 1997-EP1698	19970404
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19614204	A1	19971016	DE 1996-19614204	19960410
US 5994356	A	19991130	US 1997-832259	19970403
AU 9726368	A1	19971029	AU 1997-26368	19970404
EP 892783	A1	19990127	EP 1997-918113	19970404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
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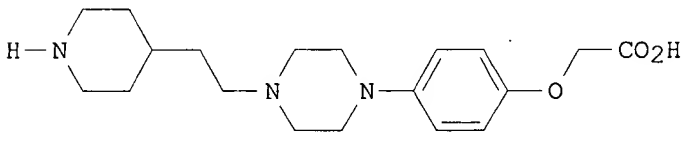
PRAI DE 1996-19614204 19960410
WO 1997-EP1698 19970404
OS MARPAT 127:358876
GI



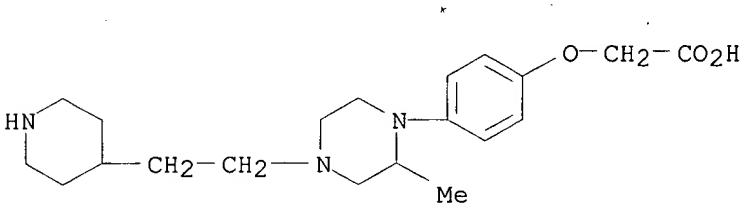
II

AB R1Z1Z2Z3Z4Z5R [I; R = OH, alkoxy, OPh, etc.; R1 = H, (phenyl)alkyl, etc.; Z1 = (oxo)piperazine-1,4-diyl, (oxo)piperidine-1,4-diyl; Z2 = CH2CH2, COCH2, NHCO, CO2, etc.; Z3 = (un)substituted (oxo)piperazine-1,4-diyl, -(oxo)piperidine-1,4- or 4,1-diyl, ,-cyclohexylene, etc.; Z4 = piperidinediyl, phenylene, cyclohexylene, etc.; Z5 = OCH2CO, NHCH2CO, CH2CO, etc.] were prepd. Thus, Me 4-piperazinophenoxyacetate was N-alkylated by 2-(1-tert-butoxycarbonyl-4-piperidinyl)ethyl methanesulfonate and the product converted in 2 steps to give title compd.

II.2HCl. Data for biol. activity of I were given.

IT **198626-02-7P 198626-05-0P 198626-25-4P**
198626-28-7P 198626-78-7P 198626-80-1P
198627-21-3P 198627-41-7P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocyclylphenoxyalkanoates and analogs as cell aggregation inhibitors)

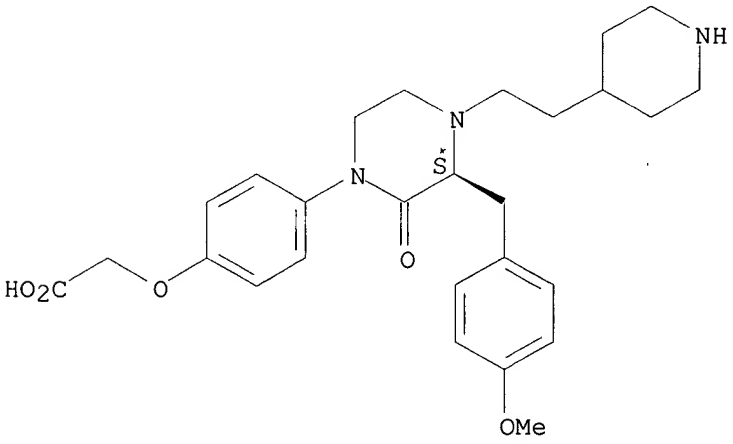
RN 198626-02-7 HCAPLUS
CN Acetic acid, [4-[2-methyl-4-[2-(4-piperidinyl)ethyl]-1-piperazinyl]phenoxy]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 198626-05-0 HCAPLUS
CN Acetic acid, [4-[3-[(4-methoxyphenyl)methyl]-2-oxo-4-[2-(4-piperidinyl)ethyl]-1-piperazinyl]phenoxy]-, dihydrochloride, (S)- (9CI) (CA INDEX NAME)

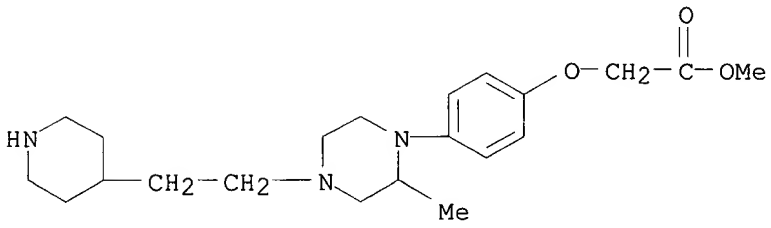
Absolute stereochemistry.



● 2 HCl

RN 198626-25-4 HCAPLUS
CN Acetic acid, [4-[2-methyl-4-[2-(4-piperidinyl)ethyl]-1-

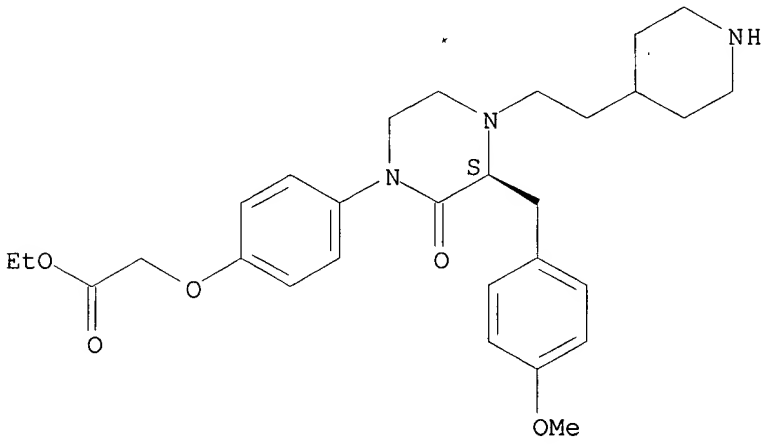
piperazinyl]phenoxy]-, methyl ester, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

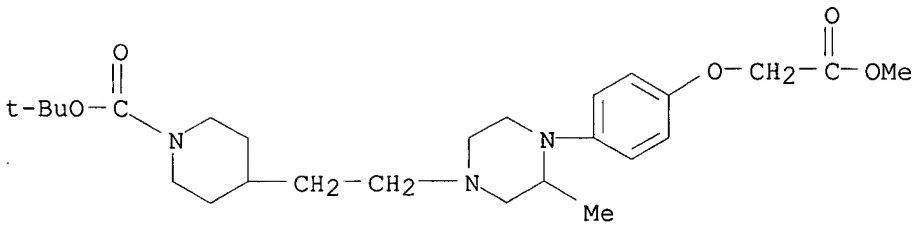
RN 198626-28-7 HCAPLUS
CN Acetic acid, [4-[3-[(4-methoxyphenyl)methyl]-2-oxo-4-[2-(4-piperidinyl)ethyl]-1-piperazinyl]phenoxy]-, ethyl ester, dihydrochloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



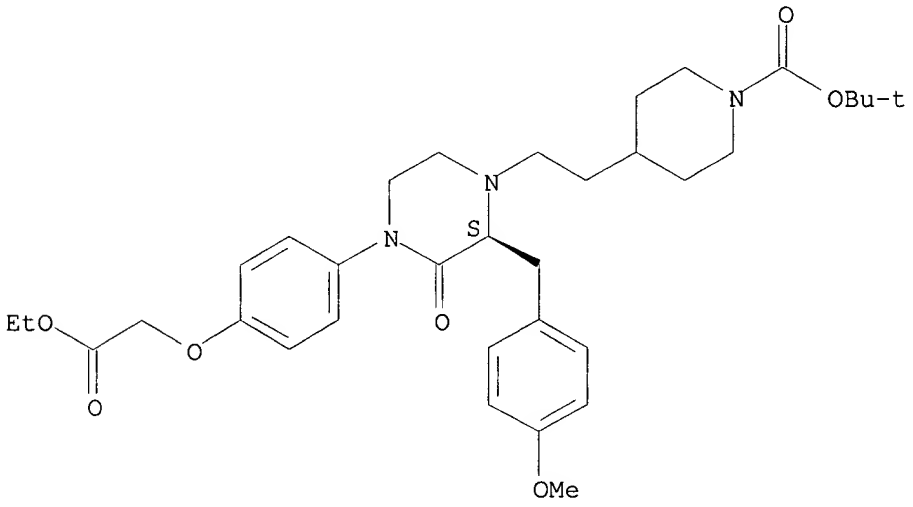
● 2 HCl

RN 198626-78-7 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[2-[4-[4-(2-methoxy-2-oxoethoxy)phenyl]-3-methyl-1-piperazinyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

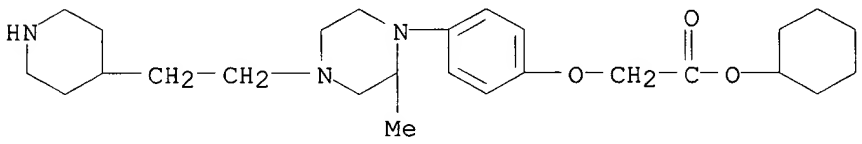


RN 198626-80-1 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[2-[4-[4-(2-ethoxy-2-oxoethoxy)phenyl]-2-[(4-methoxyphenyl)methyl]-3-oxo-1-piperazinyl]ethyl]-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



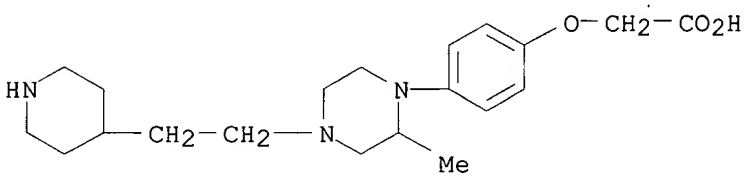
RN 198627-21-3 HCAPLUS
CN Acetic acid, [4-[2-methyl-4-[2-(4-piperidinyl)ethyl]-1-piperazinyl]phenoxy]-, cyclohexyl ester, dihydrochloride (9CI) (CA INDEX NAME)



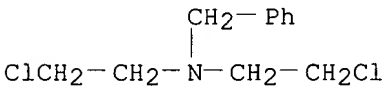
● 2 HCl

RN 198627-41-7 HCAPLUS
CN Acetic acid, [4-[2-methyl-4-[2-(4-piperidinyl)ethyl]-1-

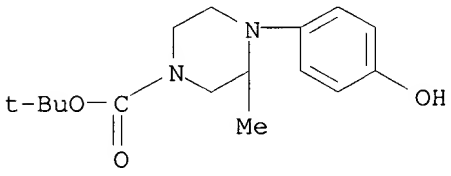
piperazinyl]phenoxy]- (9CI) (CA INDEX NAME)



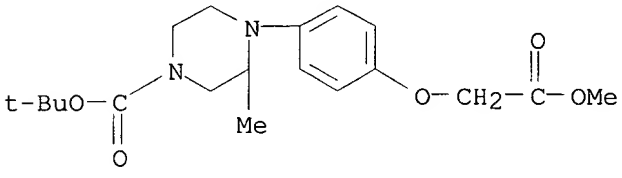
IT **55-51-6**, N,N-Bis(2-chloroethyl)benzylamine
RL: **RCT (Reactant)**
(prepn. of heterocyclylphenoxyalkanoates and analogs as cell aggregation inhibitors)
RN 55-51-6 HCAPLUS
CN Benzenemethanamine, N,N-bis(2-chloroethyl)- (9CI) (CA INDEX NAME)



IT **198627-59-7P 198627-60-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of heterocyclylphenoxyalkanoates and analogs as cell aggregation inhibitors)
RN 198627-59-7 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-(4-hydroxyphenyl)-3-methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 198627-60-0 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[4-(2-methoxy-2-oxoethoxy)phenyl]-3-methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



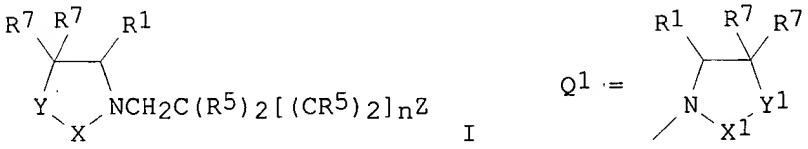
=> d l19 bib abs hitstr 9

L19 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1997:513626 HCAPLUS
DN 127:205470
TI Preparation of heterocyclylhydroxyalkanamides and related compounds as HIV protease inhibitors.
IN Tung, Roger Dennis; Salituro, Francesco Gerald; Deininger, David D.; Bhisetti, Govinda Rao; Baker, Christopher Todd; Spaltenstein, Andrew; et al.
PA Vertex Pharmaceuticals Inc., USA; Tung, Roger Dennis; Salituro, Francesco Gerald; Deininger, David D.; Bhisetti, Govinda Rao
SO PCT Int. Appl., 336 pp.
CODEN: PIXXD2
DT Patent
LA English

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9727180 A1		19970731	WO 1997-US1610	19970122

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

PRAI US 1996-592777 19960126
US 1996-724563 19960930
OS MARPAT 127:205470
GI



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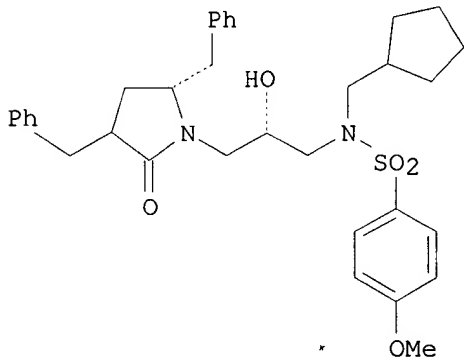


II

Searched by John Dantzman 703-308-4488

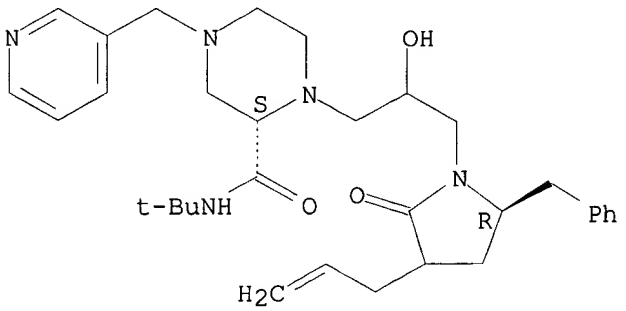
AB Title compds. [I; Z = (QR1)rX1R4, Q1, etc.; ; X, X1 = CO, CO2, SO, SO2; Y,
Y1 = [C(R2)2]p, NR2, C:C(R2)2, NR2CH2, etc.; Q = CH, N; R1, R2 = H, (substituted) alkyl, alkenyl, alkynyl, (fused) cycloalkyl, cycloalkenyl, etc.; R4 = (substituted) OR9, XR9, N(R9)2, R6, alkyl, alkenyl, (fused) cycloalkyl, cycloalkenyl, etc.; R5 = H, OH, O, R1; R6 = (substituted) aryl, carbocyclyl, heterocyclyl; R7 = H, OH, O; R9 = H, alkyl, alkenyl, alkynyl, aryl, carbocyclyl, heterocyclyl, aralkyl, carbocyclylalkyl, heterocyclylalkyl; n = 1, 2; r = 0-2], were prepd. Thus, title compd. (II) (prepn. given) inhibited HIV protease with Ki = 1.5 nM.

IT **194596-67-3P**
RL: BAC (Biological activity or effector, except adverse); RCT (Reactant);
SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocyclylhydroxyalkanamides and related compds. as HIV protease inhibitors)

RN 194596-67-3 HCAPLUS

CN 2-Piperazinecarboxamide, N-(1,1-dimethylethyl)-1-[2-hydroxy-3-[(5R)-2-oxo-5-(phenylmethyl)-3-(2-propenyl)-1-pyrrolidinyl]propyl]-4-(3-pyridinylmethyl)-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

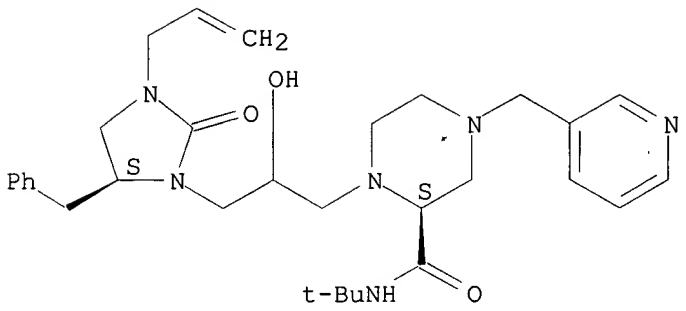


IT **194596-59-3P 194596-96-8P 194597-00-7P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocyclylhydroxyalkanamides and related compds. as HIV protease inhibitors)

RN 194596-59-3 HCAPLUS

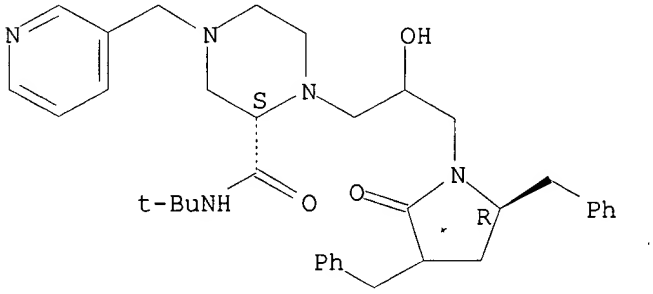
CN 2-Piperazinecarboxamide, N-(1,1-dimethylethyl)-1-[2-hydroxy-3-[(5S)-2-oxo-5-(phenylmethyl)-3-(2-propenyl)-1-imidazolidinyl]propyl]-4-(3-pyridinylmethyl)-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 194596-96-8 HCAPLUS
CN 2-Piperazinecarboxamide,
N-(1,1-dimethylethyl)-1-[2-hydroxy-3-[(5R)-2-oxo-
3,5-bis(phenylmethyl)-1-pyrrolidinyl]propyl]-4-(3-pyridinylmethyl)-,
(2S)-
(9CI) (CA INDEX NAME)

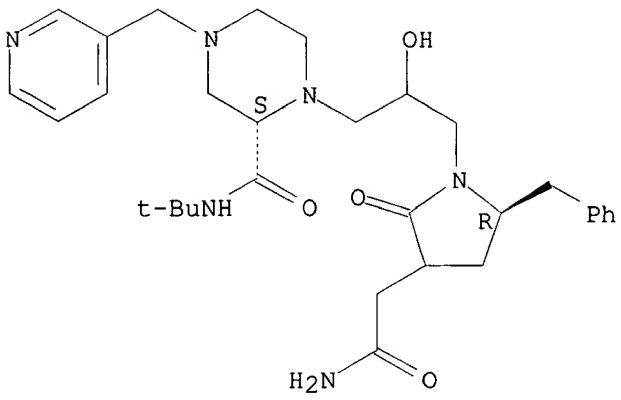
Absolute stereochemistry.



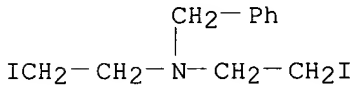
RN 194597-00-7 HCAPLUS
CN 2-Piperazinecarboxamide, 1-[3-[(5R)-3-(2-amino-2-oxoethyl)-2-oxo-5-

(phenylmethyl)-1-pyrrolidinyl]-2-hydroxypropyl]-N-(1,1-dimethylethyl)-4-(3-
pyridinylmethyl)-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

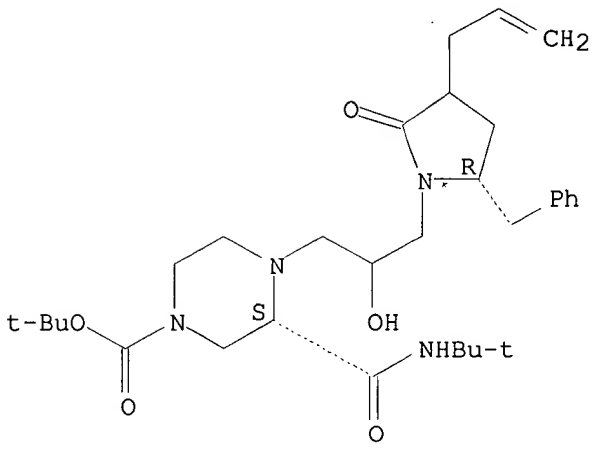


IT **194599-81-0**
RL: **RCT (Reactant)**
(prepn. of heterocyclylhydroxyalkanamides and related compds. as HIV protease inhibitors)
RN 194599-81-0 HCAPLUS
CN Benzenemethanamine, N,N-bis(2-iodoethyl)- (9CI) (CA INDEX NAME)



IT **194598-24-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of heterocyclylhydroxyalkanamides and related compds. as HIV protease inhibitors)
RN 194598-24-8 HCAPLUS
CN 1-Piperazinecarboxylic acid, 3-[[(1,1-dimethylethyl)amino]carbonyl]-4-[2-hydroxy-3-[(5R)-2-oxo-5-(phenylmethyl)-3-(2-propenyl)-1-pyrrolidinyl]propyl]-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

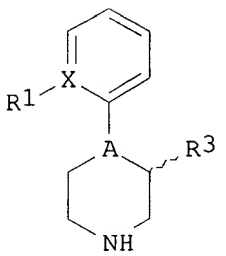

CH2
O
N
R
Ph
N
S
t-BuO
N
OH
NHBu-t
O
O

=> d l19 bib abs hitstr 10

L19 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1997:443299 HCAPLUS
DN 127:65787
TI Preparation of piperazine and piperidine derivatives as alpha 1a adrenergic receptor antagonists
IN Bock, Mark G.; Patane, Michael A.; Ponticello, Rose Ann
PA Merck and Co., Inc., USA; Bock, Mark G.; Patane, Michael A.; Ponticello, Rose Ann
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9717967	A1	19970522	WO 1996-US18321	19961112
	W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9677343	A1	19970605	AU 1996-77343	19961112
	AU 710337	B2	19990916		
	EP 865280	A1	19980923	EP 1996-940465	19961112
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	JP 11507395	T2	19990629	JP 1996-519091	19961112
	US 5922722	A	19990713	US 1998-66477	19980422
PRAI	US 1995-6765	19951115			
	GB 1996-3423	19960219			
	WO 1996-US18321	19961112			

OS MARPAT 127:65787
GI



I

AB I [A = CR2, N; X = C, N, but when X = N, R1 is absent; R1 = H, halo, alkyl, haloalkyl, alkoxy, cyano, CONR4R5, cycloalkyl; R2 = H, cyano, CONR4R5, CO2R4; R3 = H, cyano, CONR4R5, CO2R4, SO2R4; R4, R5 = H, alkyl,

cycloalkyl] were prepd. as alpha 1a adrenergic receptor antagonists (no data). I may be used for treating benign prostatic hyperplasia (no data).

E.g., reaction of (ClCH2CH2)2N(BOC) and 2-ClC6H4CH2CN in THF/DMF/NaH, followed by treatment of the piperidine product with HCl/HOAc gave 4-(2-chlorophenyl)-4-cyanopiperidine hydrochloride.

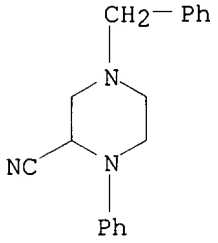
IT **135036-22-5P**

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperazine and piperidine derivs. as alpha 1a adrenergic receptor antagonists)

RN 135036-22-5 HCAPLUS

CN 2-Piperazinecarbonitrile, 1-phenyl-4-(phenylmethyl)- (9CI) (CA INDEX NAME)



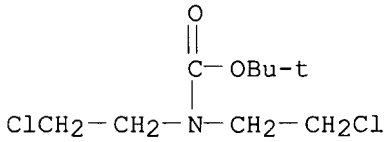
IT **118753-70-1P**

RL: **RCT (Reactant)**; SPN (Synthetic preparation); PREP (Preparation)

(prepn. of piperazine and piperidine derivs. as alpha 1a adrenergic receptor antagonists)

RN 118753-70-1 HCAPLUS

CN Carbamic acid, bis(2-chloroethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



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=> d l19 bib abs hitstr 11

L19  ANSWER 11 OF 18  HCAPLUS  COPYRIGHT 2000 ACS
AN   1995:777741  HCAPLUS
DN   123:169660
TI   Preparation of 1-(2H-1-benzopyran-2-one-8-yl)piperazine serotoninergic
     agonists and antagonists
IN   Van Steen, Bartholomeus Johanne; Hartog, Jan; Van Der Heyden, Johannes
     Antoni; Schipper, Jacques
PA   Duphar International Research B.V., Neth.
SO   Eur. Pat. Appl., 17 pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
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PI   EP 650964          A1   19950503       EP 1994-203088   19941025
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
     CA 2134630         AA   19950503       CA 1994-2134630  19941028
     NO 9404120         A    19950503       NO 1994-4120     19941028
     FI 9405086         A    19950503       FI 1994-5086     19941028
     ZA 9408520         A    19950626       ZA 1994-8520     19941028
     CN 1105360         A    19950719       CN 1994-117603   19941028
     JP 07188207        A2   19950725       JP 1994-287129   19941028
     HU 72320           A2   19960429       HU 1994-3110     19941028
     AU 9477562         A1   19950601       AU 1994-77562    19941031
     AU 675880          B2   19970220
     IL 111461          A1   19980615       IL 1994-111461   19941031
PRAI EP 1993-203058   19931102
OS   MARPAT 123:169660
GI
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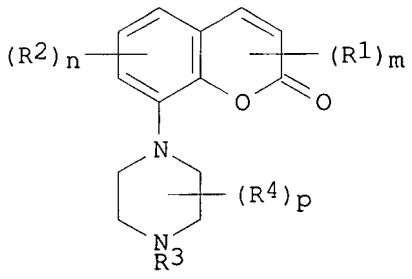


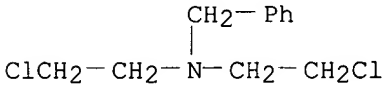
I

AB The title compds. [I; R1 = (un)substituted alkyl, alkoxy, OH, pyrrolidinyl, piperidinyl, morpholinyl, etc.; R2 = alkyl, alkoxy, halogen, CF3; R3 = H, alkyl, alkenyl; R4 = alkyl; m, p = 0-2; n = 0, 1; where m + n is .gtoreq.1] [e.g., 1-(3-methyl-2H-1-benzopyran-2-one-8-yl)piperazine hydrochloride; m.p. 270-272.degree.], which are 5-HT1A agonists (no data) and 5-HT1D antagonists (no data), are prepd. and are useful for the treatment of affections or diseases of the central nervous system caused

by disturbances of the serotonergic transmission (no data).

IT **10429-82-0**
RL: **RCT (Reactant)**
(prepn. of 1-(2H-1-benzopyran-2-one-8-yl)piperazine serotoninergic agonists and antagonists from)

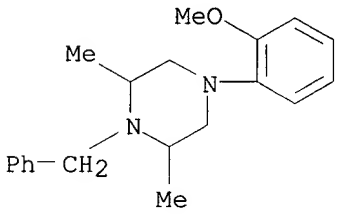
RN 10429-82-0 HCAPLUS
CN Benzenemethanamine, N,N-bis(2-chloroethyl)-, hydrochloride (9CI) (CA INDEX NAME)



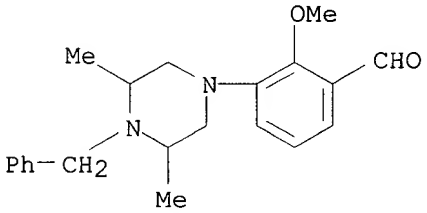
● HCl

IT **167378-20-3P 167378-21-4P 167378-22-5P**
167378-23-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of 1-(2H-1-benzopyran-2-one-8-yl)piperazine serotoninergic agonists and antagonists from)

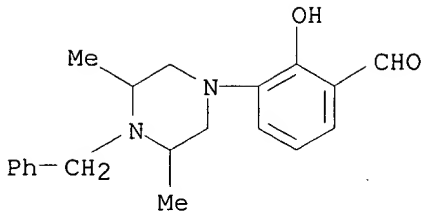
RN 167378-20-3 HCAPLUS
CN Piperazine, 4-(2-methoxyphenyl)-2,6-dimethyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



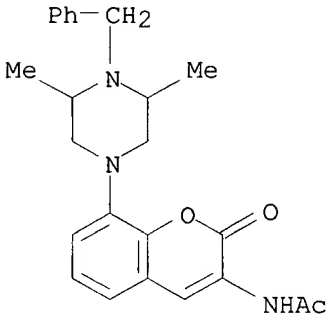
RN 167378-21-4 HCAPLUS
CN Benzaldehyde, 3-[3,5-dimethyl-4-(phenylmethyl)-1-piperazinyl]-2-methoxy- (9CI) (CA INDEX NAME)



RN 167378-22-5 HCAPLUS
CN Benzaldehyde, 3-[3,5-dimethyl-4-(phenylmethyl)-1-piperazinyl]-2-hydroxy- (9CI) (CA INDEX NAME)



RN 167378-23-6 HCAPLUS
CN Acetamide, N-[8-[3,5-dimethyl-4-(phenylmethyl)-1-piperazinyl]-2-oxo-2H-1-benzopyran-3-yl]- (9CI) (CA INDEX NAME)



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=> d l19 bib abs hitstr 12

L19  ANSWER 12 OF 18  HCAPLUS  COPYRIGHT 2000 ACS
AN   1990:478178  HCAPLUS
DN   113:78178
TI   Preparation of 4-oxoquinoline-3-carboxylic acid derivatives as
     antibacterial agents
IN   Iwata, Masayuki; Kimura, Tomio; Inoue, Teruhiko; Fujihara, Yoshimi;
     Katsube, Tetsushi
PA   Ube Industries, Ltd., Japan; Sankyo Co., Ltd.
SO   Eur. Pat. Appl., 60 pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
PI   EP 352123          A2   19900124       EP 1989-307423   19890720
     EP 352123          A3   19900905
     EP 352123          B1   19950118
         R:  AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
     FI 8903467         A    19900121       FI 1989-3467     19890718
     FI 95130           B    19950915
     FI 95130           C    19951227
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     CN 1040977         A    19900404       CN 1989-107044   19890720
     CN 1028226         B    19950419
     EP 610958          A2   19940817       EP 1994-103669   19890720
     EP 610958          A3   19950322
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     ES 2070175         T3   19950601       ES 1989-307423   19890720
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     US 5073556         A    19911217       US 1991-659829   19910222
     US 5436367         A    19950725       US 1994-227678   19940414
     US 5496951         A    19960305       US 1995-379975   19950127
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     JP 2992033         B2   19991220
PRAI JP 1988-180557   19880720
     JP 1988-224220   19880907
     US 1989-381025   19890717
     EP 1989-307423   19890720
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OS   MARPAT 113:78178
GI
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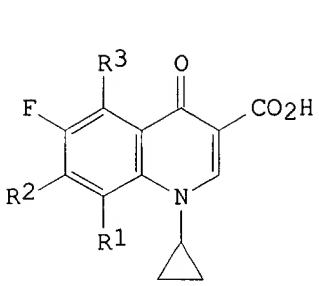

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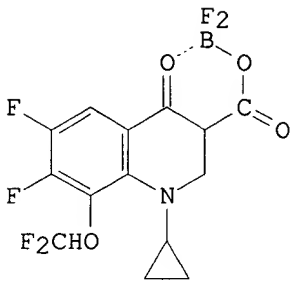
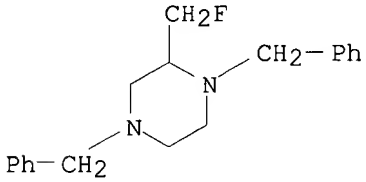


II

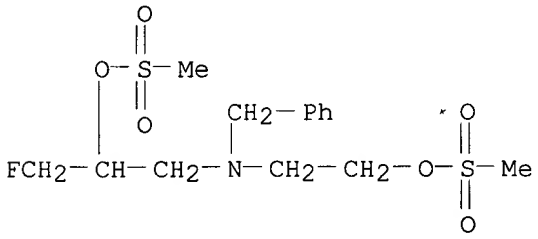
AB The title compds. (I; R1 = fluorinated MeO, R2 = N heterocycle; R3 = H, NH2) are prepd. 2-Methylpiperazine (1.63 g) was added to a soln. of 2.58 g chelate II (prepn. given) in Me2SO and the mixt. was kept overnight at room temp. to give 1.74 g I (R1 = OCHF2, R2 = F, R3 = H), which showed MIC of 0.05 .mu.g/mL against Staphylococcus aureus 209P. Also prepd. were 60 addnl. I and salts.

IT **111760-36-2P 128427-23-6P 128427-28-1P 128427-29-2P**
RL: **RCT (Reactant)**; SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of antibacterial oxoquinolinecarboxylic acid derivs.)

RN 111760-36-2 HCAPLUS
CN Piperazine, 2-(fluoromethyl)-1,4-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

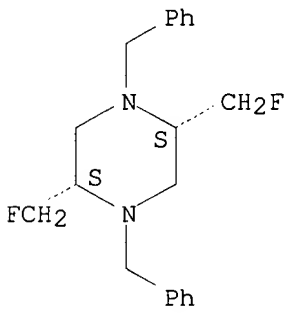


RN 128427-23-6 HCAPLUS
CN 2-Propanol, 1-fluoro-3-[[2-[(methylsulfonyl)oxy]ethyl](phenylmethyl)amino]-, methanesulfonate (ester) (9CI) (CA INDEX NAME)



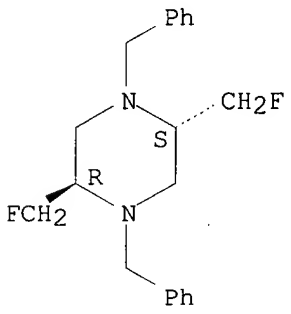
RN 128427-28-1 HCAPLUS
CN Piperazine, 2,5-bis(fluoromethyl)-1,4-bis(phenylmethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

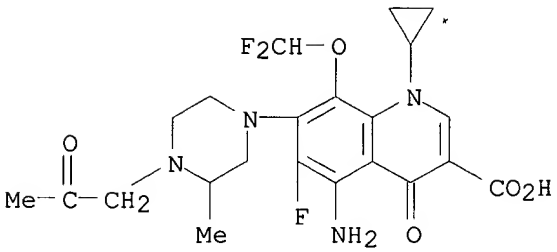


RN 128427-29-2 HCAPLUS
CN Piperazine, 2,5-bis(fluoromethyl)-1,4-bis(phenylmethyl)-, trans- (9CI) (CA INDEX NAME)

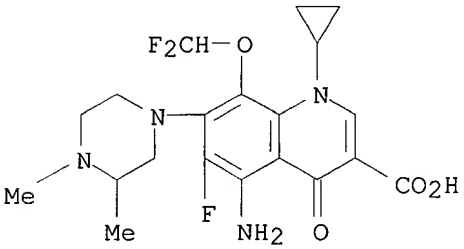
Relative stereochemistry.



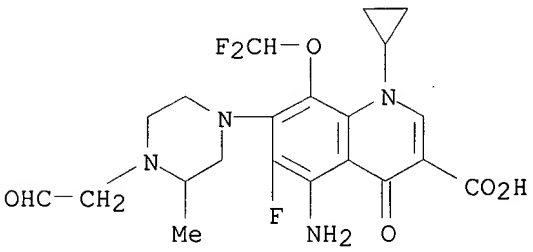
IT **128427-77-0P 128427-78-1P 128427-80-5P 128427-81-6P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as antibacterial agent)
RN 128427-77-0 HCAPLUS
CN 3-Quinolinecarboxylic acid, 5-amino-1-cyclopropyl-8-(difluoromethoxy)-6-fluoro-1,4-dihydro-7-[3-methyl-4-(2-oxopropyl)-1-piperazinyl]-4-oxo- (9CI)
(CA INDEX NAME)



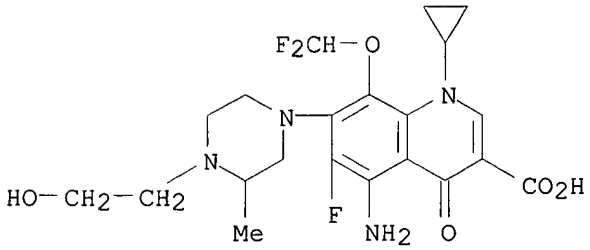
RN 128427-78-1 HCAPLUS
CN 3-Quinolinecarboxylic acid, 5-amino-1-cyclopropyl-8-(difluoromethoxy)-7-(3,4-dimethyl-1-piperazinyl)-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 128427-80-5 HCAPLUS
CN 3-Quinolinecarboxylic acid, 5-amino-1-cyclopropyl-8-(difluoromethoxy)-6-fluoro-1,4-dihydro-7-[3-methyl-4-(2-oxoethyl)-1-piperazinyl]-4-oxo- (9CI) (CA INDEX NAME)



RN 128427-81-6 HCAPLUS
CN 3-Quinolinecarboxylic acid, 5-amino-1-cyclopropyl-8-(difluoromethoxy)-6-fluoro-1,4-dihydro-7-[4-(2-hydroxyethyl)-3-methyl-1-piperazinyl]-4-oxo- (9CI) (CA INDEX NAME)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L19 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1985:132069 HCAPLUS
DN 102:132069
TI
[[4-[4-(4-Phenyl-1-piperazinyl)phenoxymethyl]-1,3-dioxolan-2-yl]methyl]-1H-imidazoles and 1H-1,2,4-triazoles
IN Heeres, Jan; Stokbroekx, Raymond A.; Backx, Leo J. J.
PA Janssen Pharmaceutica N. V., Belg.
SO Eur. Pat. Appl., 113 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 118138	A1	19840912	EP 1984-200092	19840124
	EP 118138	B1	19890614		
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	US 4619931	A	19861028	US 1984-569122	19840109
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	CA 1271194	A1	19900703	CA 1984-447194	19840210
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	DK 164454	C	19921109		
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	FI 82043	C	19910110		
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	NO 160138	B	19881205		
	NO 160138	C	19890315		
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	AU 559461	B2	19870312		
	ZA 8401449	A	19851030	ZA 1984-1449	19840227
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	NO 163817	C	19900725		
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	FI 84058	C	19911010		
	NO 9000396	A	19840829	NO 1990-396	19900129
	NO 173866	B	19931108		
	NO 173866	C	19940216		
	JP 05246999	A2	19930924	JP 1991-24132	19910124
	JP 07064823	B4	19950712		
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	DK 9101088	A	19910607	DK 1991-1088	19910607

	DK	166673	B1 19930628
PRAI	US	1983-470405	19830228
	US	1984-569122	19840109
	EP	1984-200092	19840124
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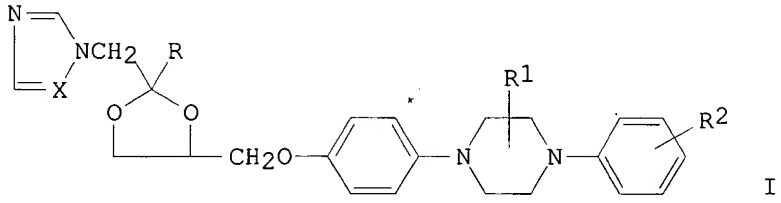

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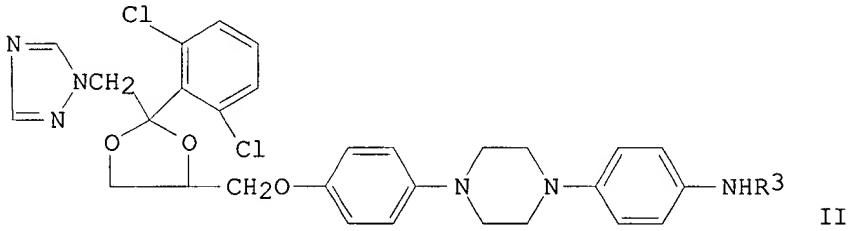


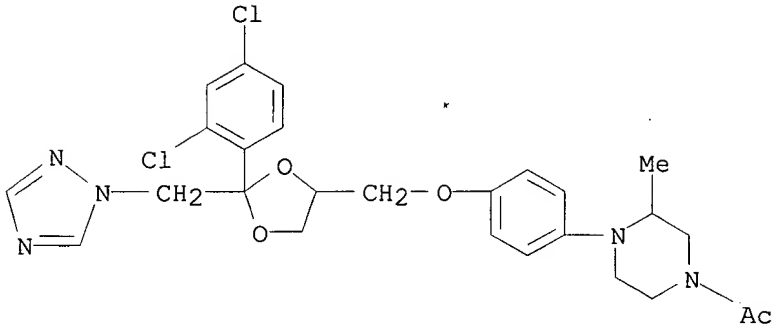
II

AB Over 300 title compds. I [R = (un)substituted Ph; R1 = H, alkyl; R2 = urea, thiourea, amido, 5-membered N-contg. heterocycle; X = N, CH] and their intermediates, useful as pharmaceutical fungicides, were prepd. Thus, aniline deriv. II (R3 = H) was treated with ClCO2Ph to give II (R3 = CO2Ph). At 2.5 mg/kg orally, daily for 3 days in rats, II (R3 = CO2Ph) controlled Candida albicans at the 14th day after infection.

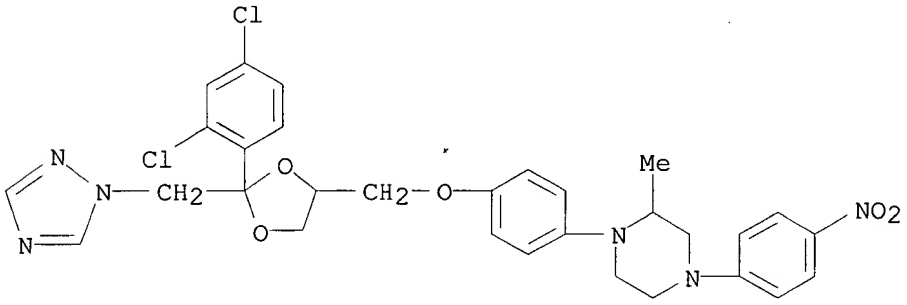
IT **95182-91-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deacylation of)

RN 95182-91-5 HCAPLUS

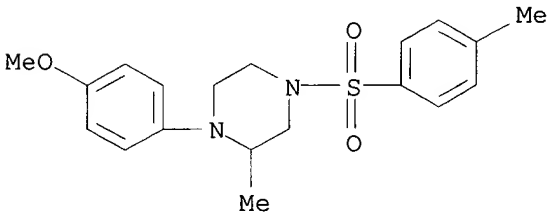
CN Piperazine, 4-acetyl-1-[4-[[2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]-2-methyl- (9CI) (CA INDEX NAME)



IT **95182-93-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrogenation of)
RN 95182-93-7 HCAPLUS
CN Piperazine,
1-[4-[[2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-
1,3-dioxolan-4-yl]methoxy]phenyl]-2-methyl-4-(4-nitrophenyl)- (9CI) (CA
INDEX NAME)

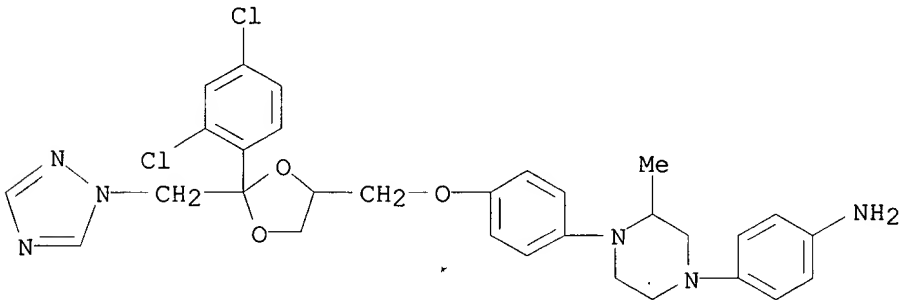


IT **95182-88-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of)
RN 95182-88-0 HCAPLUS
CN Piperazine, 1-(4-methoxyphenyl)-2-methyl-4-[(4-methylphenyl)sulfonyl]-
(9CI) (CA INDEX NAME)

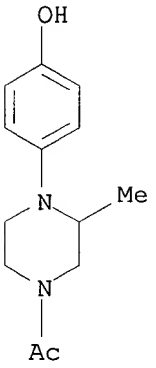


IT **95182-94-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and pharmaceutical fungicidal activity of)
RN 95182-94-8 HCAPLUS
CN Benzenamine, 4-[4-[4-[[2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]-3-methyl-1-piperazinyl]- (9CI)
(CA INDEX NAME)

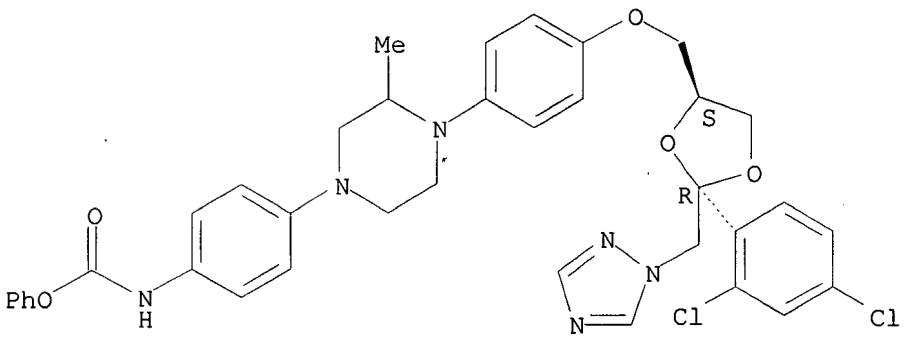


IT **95182-90-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with dioxolanemethanol deriv.)
RN 95182-90-4 HCAPLUS
CN Piperazine, 4-acetyl-1-(4-hydroxyphenyl)-2-methyl- (9CI) (CA INDEX NAME)

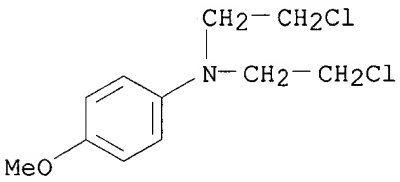


IT **95182-20-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., reaction with amines, and pharmaceutical fungicidal activity of)
RN 95182-20-0 HCAPLUS
CN Carbamic acid, [4-[4-[4-[[2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]-3-methyl-1-piperazinyl]phenyl]-, phenyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **1448-52-8**
RL: **RCT (Reactant)**
(reaction of, with aminophenylimidazolidinone)
RN 1448-52-8 HCAPLUS
CN Benzenamine, N,N-bis(2-chloroethyl)-4-methoxy- (9CI) (CA INDEX NAME)



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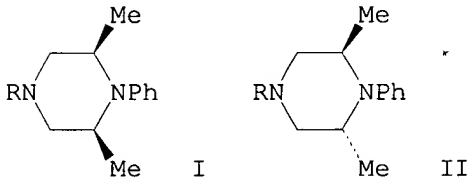
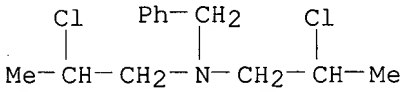
L19 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1982:492233 HCAPLUS
DN 97:92233
TI New synthesis of 1-phenyl-2,6-dimethylpiperazine
AU Fontanella, L.; Mariani, L.; Depaoli, A.
CS Lab. Ricerca, Gruppo Lepetit S.p.A., Milan, Italy
SO Farmaco, Ed. Sci. (1982), 37(6), 378-86
CODEN: FRPSAX; ISSN: 0430-0920
DT Journal
LA Italian
GI



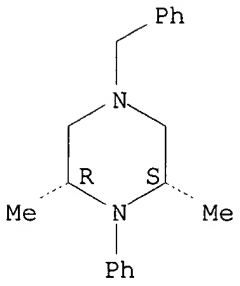
AB Piperazine isomers I (R = H) and II (R = H) were prepd. from PhCH2N[CH2CH(OH)Me]2 (III). Thus, PhCH2NH2 reacted with propylene oxide, the III obtained was treated with SOCl2 to give PhCH2N(CH2CHClMe)2, the latter reacted with PhNH2 and Na2CO3 to yield I (R = PhCH2) and II (R = PhCH2), and hydrogenolysis of the products gave I (R = H) and II (R = H).

IT **82784-19-8P**
RL: **RCT (Reactant)**; SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cyclocondensation reaction of, with aniline)
RN 82784-19-8 HCAPLUS
CN Benzenemethanamine, N,N-bis(2-chloropropyl)- (9CI) (CA INDEX NAME)



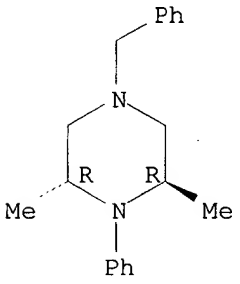
IT **76388-28-8P 76388-39-1P 82776-48-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrogenolysis of)
RN 76388-28-8 HCAPLUS
CN Piperazine, 2,6-dimethyl-1-phenyl-4-(phenylmethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



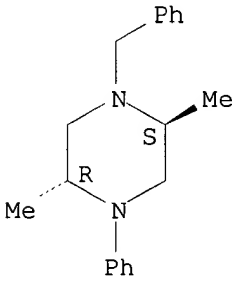
RN 76388-39-1 HCAPLUS
CN Piperazine, 2,6-dimethyl-1-phenyl-4-(phenylmethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 82776-48-5 HCAPLUS
CN Piperazine, 2,5-dimethyl-1-phenyl-4-(phenylmethyl)-, trans- (9CI) (CA INDEX NAME)

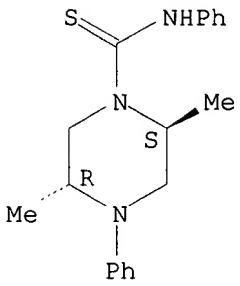
Relative stereochemistry.



IT **82776-50-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 82776-50-9 HCAPLUS
CN 1-Piperazinecarbothioamide, 2,5-dimethyl-N,4-diphenyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Searched by John Dantzman 703-308-4488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L19 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1981:30807 HCAPLUS
DN 94:30807
TI Synthesis for the preparation of tetracyclic compounds
IN Olivie, Jacques
PA Akzona, Inc., USA
SO U.S., 8 pp. Cont.-in-part of U.S. 4,025,513.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4217452	A	19800812	US 1976-754216	19761227
	NL 7401807	A	19750812	NL 1974-1807	19740209
	NL 179906	B	19860701		
	NL 179906	C	19861201		
	US 4025513	A	19770524	US 1975-547680	19750206
	US 4254031	A	19810303	US 1979-64812	19790808
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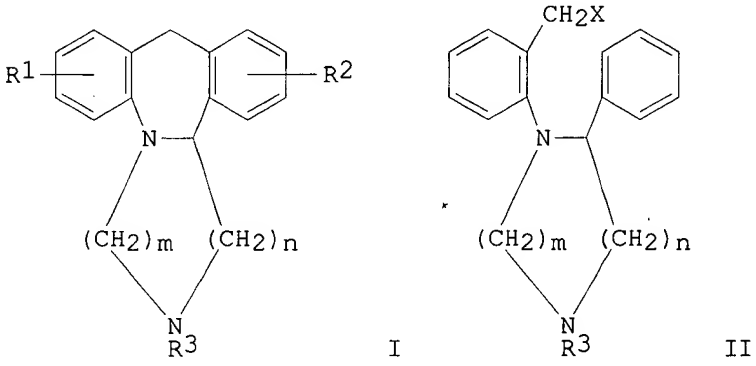
	US 1976-754216	19761227			

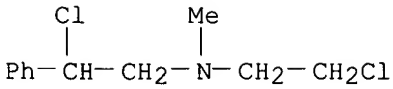
GI



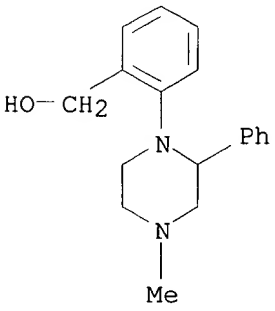
AB The title compd. I (R1, R2 = H, HO, halo, C1-4 alkyl or alkoxy, CF3; R3 = H, C1-6 alkyl; m .noteq. m = 1, 2) are prepd. by cyclocondensation reaction of II (X = HO, MeO, Me3SiO, H3SiO, C1-6 alkoxy, C7-10 phenylalkoxy, C5-10 cycloalkoxy or cycloalkylalkoxy, C2-6 alkenyloxy, tetrahydropyranyloxy). Thus, II (R3 = Me; X = HO) was heated with polyphosphoric acid to give 100% I (R1 = R2 = H; R3 = Me; m = 2; n = 1).

IT **22270-22-0**
RL: **RCT (Reactant)**
(cyclocondensation reaction of, with o-aminobenzyl alc.)

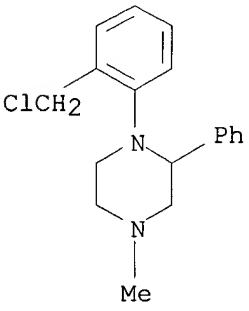
RN 22270-22-0 HCAPLUS
CN Benzeneethanamine, .beta.-chloro-N-(2-chloroethyl)-N-methyl- (9CI) (CA INDEX NAME)



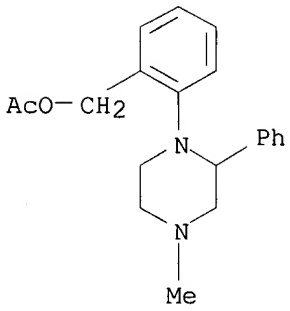
IT **57321-32-1P 76134-70-8P 76134-71-9P**
76134-72-0P 76134-73-1P 76134-74-2P
76134-75-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cyclocondensation to dibenzo[c,f]pyrazino[1,2-d]azepines)
RN 57321-32-1 HCAPLUS
CN Benzenemethanol, 2-(4-methyl-2-phenyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



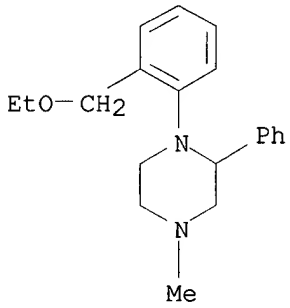
RN 76134-70-8 HCAPLUS
CN Piperazine, 1-[2-(chloromethyl)phenyl]-4-methyl-2-phenyl- (9CI) (CA INDEX
NAME)



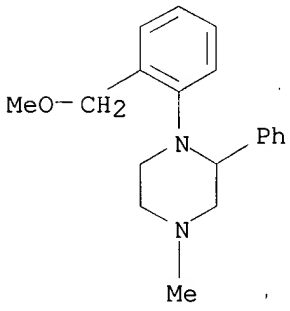
RN 76134-71-9 HCAPLUS
CN Benzenemethanol, 2-(4-methyl-2-phenyl-1-piperazinyl)-, acetate (ester) (9CI) (CA INDEX NAME)



RN 76134-72-0 HCAPLUS
CN Piperazine, 1-[2-(ethoxymethyl)phenyl]-4-methyl-2-phenyl- (9CI) (CA INDEX
NAME)



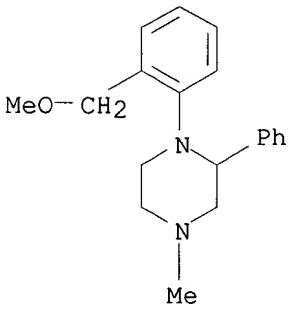
RN 76134-73-1 HCAPLUS
CN Piperazine, 1-[2-(methoxymethyl)phenyl]-4-methyl-2-phenyl- (9CI) (CA
INDEX NAME)



RN 76134-74-2 HCAPLUS
CN Piperazine, 1-[2-(methoxymethyl)phenyl]-4-methyl-2-phenyl-, ethanedioate
(9CI) (CA INDEX NAME)

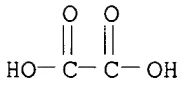
CM 1

CRN 76134-73-1
CMF C19 H24 N2 O

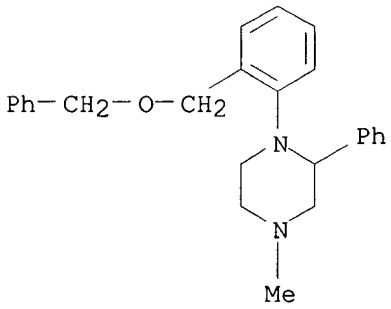


CM 2

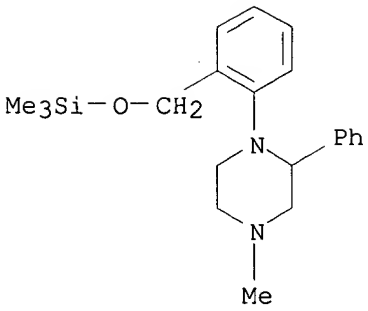
CRN 144-62-7
CMF C2 H2 O4



RN 76134-75-3 HCAPLUS
CN Piperazine, 4-methyl-2-phenyl-1-[2-[(phenylmethoxy)methyl]phenyl]- (9CI) (CA INDEX NAME)



IT **76134-86-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 76134-86-6 HCAPLUS
CN Piperazine, 4-methyl-2-phenyl-1-[2-[[(trimethylsilyl)oxy]methyl]phenyl]- (9CI) (CA INDEX NAME)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N
Ph
N
Me

=> d l19 bib abs hitstr 16

L19 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1976:121903 HCAPLUS
DN 84:121903
TI Tetracyclic compounds
PA AKZO N. V., Neth.
SO Neth. Appl., 23 pp.
CODEN: NAXXAN
DT Patent
LA Dutch

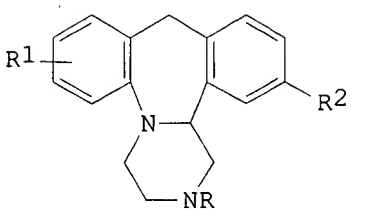
Similar to ANS. 15

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 7401807	A	19750812	NL 1974-1807	19740209
	NL 179906	B	19860701		
	NL 179906	C	19861201		
	GB 1498632	A	19780125	GB 1975-3670	19750128
	GB 1498633	A	19780125	GB 1976-39732	19750128
	DK 7500323	A	19750929	DK 1975-323	19750130
	DK 150144	B	19861215		
	DK 150144	C	19871019		
	FI 7500327	A	19750810	FI 1975-327	19750206
	FI 57106	B	19800229		
	FI 57106	C	19800610		
	US 4025513	A	19770524	US 1975-547680	19750206
	CH 613705	A	19791015	CH 1975-1438	19750206
	SE 7501365	A	19750811	SE 1975-1365	19750207
	SE 418745	B	19810622		
	SE 418745	C	19811001		
	DE 2505239	A1	19750814	DE 1975-2505239	19750207
	DE 2505239	C2	19881103		
	JP 50108299	A2	19750826	JP 1975-16156	19750207
	FR 2260579	A1	19750905	FR 1975-3954	19750207
	HU 169018	P	19760928	HU 1975-AO404	19750207
	ES 434533	A1	19761201	ES 1975-434533	19750207
	CA 1084490	A1	19800826	CA 1975-219742	19750210
	US 4217452	A	19800812	US 1976-754216	19761227
	US 4254031	A	19810303	US 1979-64812	19790808

PRAI NL 1974-1807 19740209
GB 1975-3670 19750128
US 1975-547680 19750206
US 1976-754216 19761227

GI



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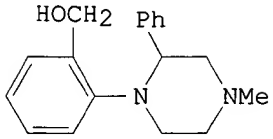
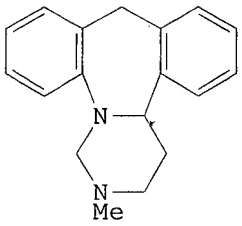


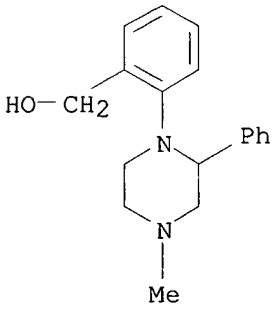
II



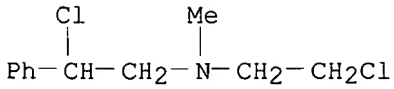
III

AB Dibenzopyrazinoazepines I (R = Me, R1 = H, 8-Cl, 8-OMe, 7-Me, 8-OH, 8-Br, R2 = H; R = Me, R1 = H, R2 = Me, Cl; R = Pr, cyclopropylmethyl, CH2CH2NMe2) were prepd. Thus MeNHCH2CH2OH was treated with styrene oxide, HOCH2CH2NMeCH2CHPhOH chlorinated, ClCH2CH2NMeCH2CHPhCl cyclized with 2-H2NC6H4CH2OH, and piperazine II cyclized with polyphosphoric acid to I (R = Me,R1 = R2 = H). The dibenzopyrimidinoazepine III was similarly prepd.

IT **57321-32-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cyclization of)
RN 57321-32-1 HCAPLUS
CN Benzenemethanol, 2-(4-methyl-2-phenyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



IT **22270-22-0P**
RL: **RCT (Reactant)**; SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with aminobenzyl alc.)
RN 22270-22-0 HCAPLUS
CN Benzeneethanamine, .beta.-chloro-N-(2-chloroethyl)-N-methyl- (9CI) (CA INDEX NAME)

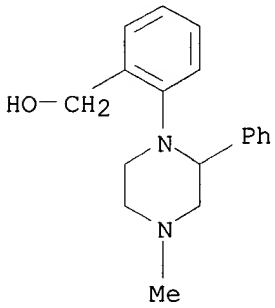


=> d l19 bib abs hitstr 17

L19 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1975:593392 HCAPLUS
DN 83:193392
TI Tetracyclic compounds
IN Olivie, Jacques
PA AKZO N. V., Neth.
SO Ger. Offen., 26 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2505239	A1	19750814	DE 1975-2505239	19750207
	DE 2505239	C2	19881103		
	NL 7401807	A	19750812	NL 1974-1807	19740209
	NL 179906	B	19860701		
	NL 179906	C	19861201		
PRAI	NL 1974-1807		19740209		

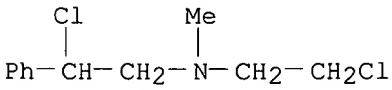
GI For diagram(s), see printed CA Issue.
AB Serotonin antagonists, antihistaminic, and antidepressant (no data) condensed dibenzozepines I (R = Me, R1 = H, 8-Cl, 8-OMe, 7-Me, 8-OH, 8-Br, 13-Me, 13-Cl, 11-OMe, 13-OMe, 12-Cl; R = H, Et, Pr, cyclopropylmethyl, Me2NCH2CH2, 2-(2-pyridyl)ethyl, R1 = H) and II (R = Me, R1 = H, CF3; R = H, Et, R1 = H) were prepd. Thus, MeNHCH2CH2OH was treated with styrene oxide, HOCHPhCH2NMeCH2CH2OH chlorinated, PhCHClCH2NMe2CH2CH2Cl condensed with 2-H2NC6H4CH2OH, and III cyclized with polyphosphoric acid to give I (R = Me, R1 = H).
IT **57321-32-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cyclization of)
RN 57321-32-1 HCAPLUS
CN Benzenemethanol, 2-(4-methyl-2-phenyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



IT **22270-22-0P**
RL: **RCT (Reactant)**; SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with 2-aminobenzyl alc.)

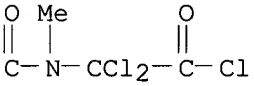
Searched by John Dantzman 703-308-4488

RN 22270-22-0 HCAPLUS
CN Benzeneethanamine, .beta.-chloro-N-(2-chloroethyl)-N-methyl- (9CI) (CA INDEX NAME)

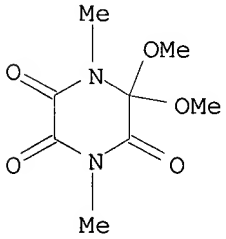


=> d l19 bib abs hitstr 18

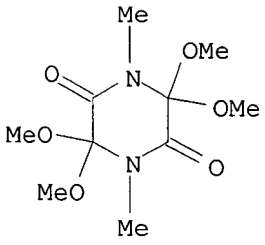
L19 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2000 ACS
AN 1972:565055 HCAPLUS
DN 77:165055
TI Synthesis and reactions of a tetrachlorodioxopiperazine
AU Ottenheym, H. C. J.; Spande, T. F.; Witkop, B.
CS Natl. Inst. Arthritis Metab. Dis., Natl. Inst. Health, Bethesda, Md., USA
SO J. Org. Chem. (1972), 37(21), 3358-60
CODEN: JOCEAH
DT Journal
LA English
AB N-Tri-fluoroacetyl-.alpha.,.alpha.-dichlorosarcosyl chloride, prepd. by reaction of N-trifluoroacetylsarcosine, first with SOCl2, then with SO2Cl2, on standing forms 2,2,5,5-tetrachlorosarcosine anhydride, easily convertible by methanolysis to 2,2-dimethoxy-5-oxo- and 2,2,5,5-tetramethoxysarcosine anhydride, or by hydrolysis to 2,3,5,6-tetraoxo-1,4-dimethylpiperazine.
IT **35191-65-2**
RL: **RCT (Reactant)**
(decompn. of, cyclodimerization in)
RN 35191-65-2 HCAPLUS
CN Acetyl chloride, dichloro[methyl(trifluoroacetyl)amino]- (9CI) (CA INDEX NAME)



IT **35141-12-9P 35141-13-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 35141-12-9 HCAPLUS
CN Piperazinetrione, 6,6-dimethoxy-1,4-dimethyl- (9CI) (CA INDEX NAME)



RN 35141-13-0 HCAPLUS
CN 2,5-Piperazinedione, 3,3,6,6-tetramethoxy-1,4-dimethyl- (9CI) (CA INDEX NAME)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L3               STR L1
L4             3 S L3
L5           618 S L3 FUL
L6               STR L3
L7               STR L6
L8             0 S L7
L9             7 S L7 SSS SAM  SUB=L5
L10          166 S L7 SSS FUL SUB=L5

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                SAV L14 BERNPCT094B/A
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33 compounds

49 cites

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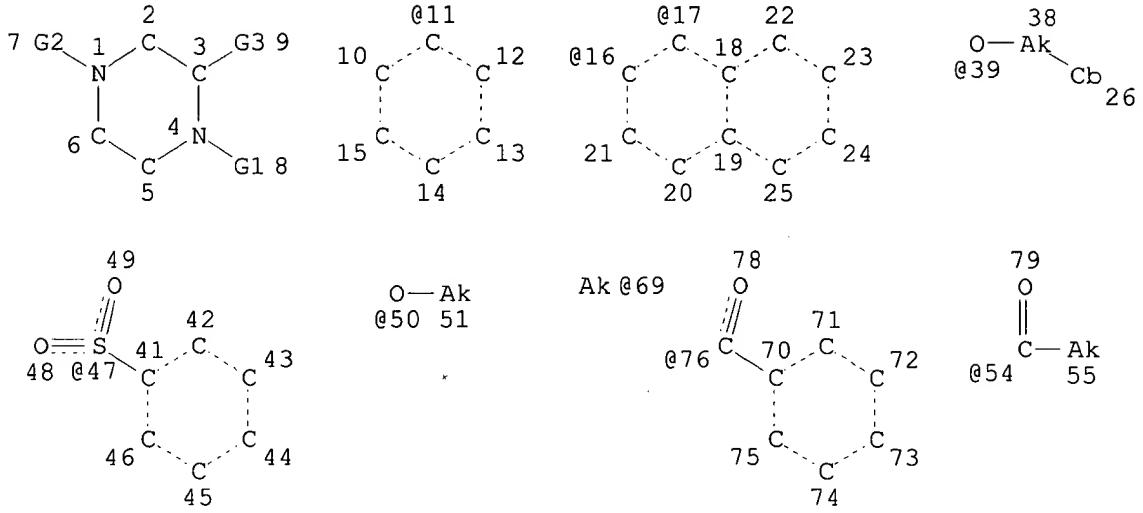

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VAR G3=69/50/11/16/17/59/39
NODE ATTRIBUTES:
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CONNECT IS E1 RC AT 51
CONNECT IS E1 RC AT 55
CONNECT IS E1 RC AT 69
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 26
GGCAT IS UNS AT 60
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 53

STEREO ATTRIBUTES: NONE
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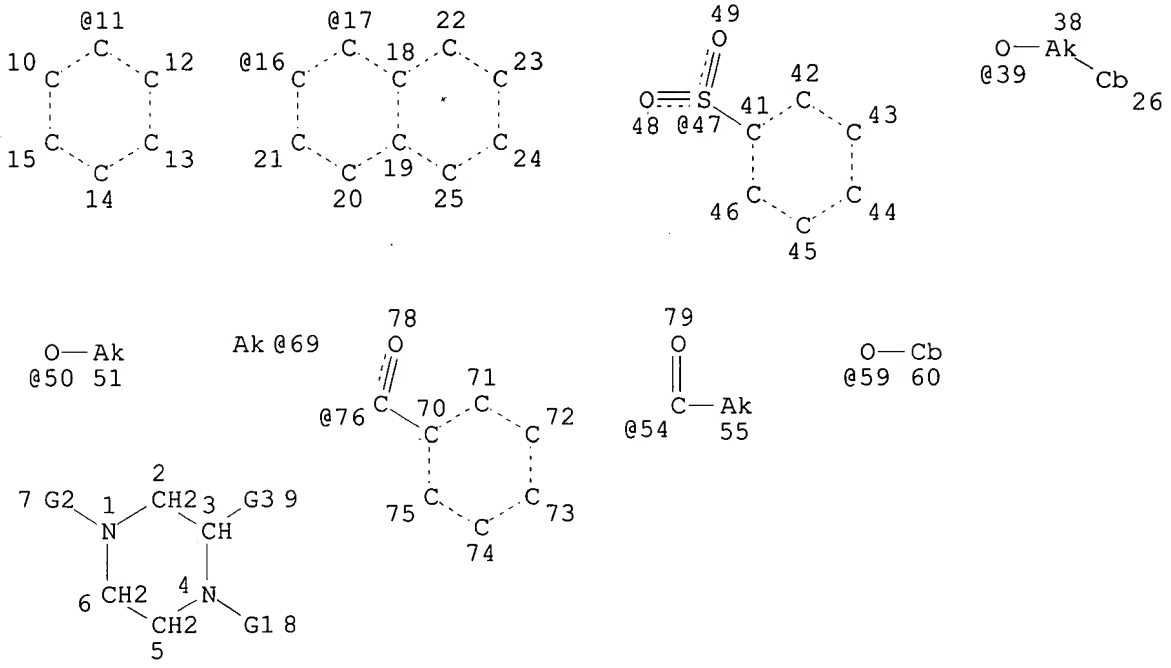

VAR G1=69/11/16/17/47/76/CHO/54/NH2/39
VAR G2=69/50/11/16/17/59/39
VAR G3=69/50/11/16/17/59/39
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 1
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CONNECT IS E2 RC AT 38
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DEFAULT MLEVEL IS ATOM
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GGCAT IS UNS AT 60
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 53

STEREO ATTRIBUTES: NONE
L14 33 SEA FILE=REGISTRY SUB=L5 CSS FUL L12

=> d bib abs hitstr

L15 ANSWER 1 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1998:603137 CAPLUS
DN 129:221194
TI Curative medicine for disease caused by infection of Helicobacter
IN Yamashita, Katsuji; Yamane, Takehiko; Sakashita, Shinichi; Saka, Yasuhiro;
Hosoe, Kazunori; Fujii, Kenji
PA Kaneka Corp., Japan
SO Eur. Pat. Appl., 39 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 861660	A1	19980902	EP 1998-103481	19980227
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 10298080	A2	19981110	JP 1998-38590	19980220
	CA 2230649	AA	19980828	CA 1998-2230649	19980227
PRAI	JP 1997-46753		19970228		

OS MARPAT 129:221194
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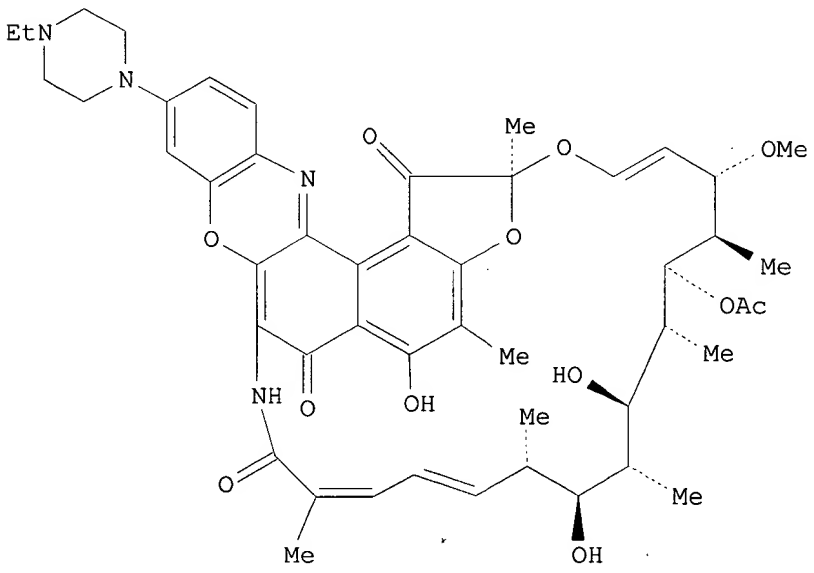
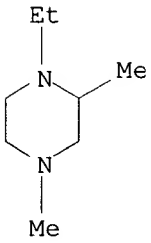


I

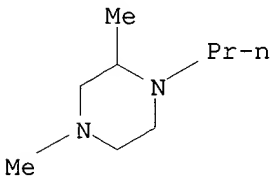
AB A curative medicine for a digestive organ disease caused by the infection of Helicobacter, comprises a rifamycin deriv. Pharmaceutical formulations are described and antibacterial activity of 55 derivs. are given. Also prepn. of the derivs. are described, e.g., prepn. of I from benzoxazinorifamycin and N-ethylpiperazine.

Searched by John Dantzman 703-308-4488

IT **51253-74-8 212307-33-0**
RL: RCT (Reactant)
(piperazino rifamycin derivs. for treatment of Helicobacter infection)
RN 51253-74-8 CAPLUS
CN Piperazine, 1-ethyl-2,4-dimethyl- (9CI) (CA INDEX NAME)



RN 212307-33-0 CAPLUS
CN Piperazine, 2,4-dimethyl-1-propyl- (9CI) (CA INDEX NAME)



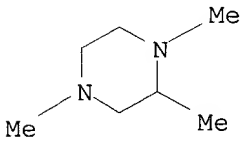
=> d bib abs hitstr 2

L15 ANSWER 2 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1994:643920 CAPLUS
DN 121:243920
TI Low-viscosity magnetorheological materials
IN Weiss, Keith D.; Carlson, J. David; Duclos, Theodore G.
PA Lord Corp., USA
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9410692	A1	19940511	WO 1993-US9735	19931012
	W: BY, CA, JP, KZ, LV, RU, UA, UZ				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2147990	AA	19940511	CA 1993-2147990	19931012
	EP 672293	A1	19950920	EP 1993-923848	19931012
	R: DE, FR, GB, IE, IT, LU, MC, NL, SE				
	JP 08502780	T2	19960326	JP 1993-511091	19931012
	CN 1088019	A	19940615	CN 1993-120703	19931030
PRAI	US 1992-968735		19921030		
	WO 1993-US9735		19931012		

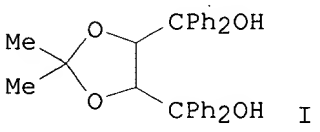
AB A magnetorheol. material contg. a particle component and a carrier fluid has a change in viscosity with temp. (.DELTA..eta./.DELTA.T ratio) .ltoreq.9.0 cP/.degree. at 25.degree. to -40.degree.. The magnetorheol. material exhibits a substantial magnetorheol. effect with a minimal variation in mech. properties with respect to changes in temp. The magnetorheol. material is advantageous in that it provides for the design of devices that are smaller, more efficient, and consume less power.

IT **120-85-4**, 1,2,4-Trimethylpiperazine
RL: USES (Uses)
(magnetorheol. material contg., low-viscosity)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

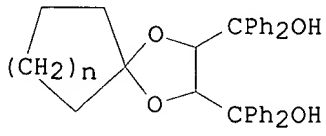


=> d bib abs hitstr 3

L15 ANSWER 3 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1993:101286 CAPLUS
DN 118:101286
TI Optically active trans-bis(hydroxydiphenylmethyl)-2,2-dimethyl-1,3-dioxacyclopentane and its derivatives as chiral shift reagents for the determination of enantiomeric purity and absolute configuration
AU Tanaka, Koichi; Ootani, Minoru; Toda, Fumio
CS Fac. Eng., Ehime Univ., Matsuyama, 790, Japan
SO Tetrahedron: Asymmetry (1992), 3(6), 709-12
CODEN: TASYE3; ISSN: 0957-4166
DT Journal
LA English
GI



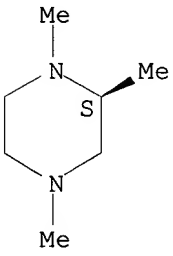
I



II

AB Title compds. I and II (n = 1, 2) were useful as chiral shift reagents for the detn. of enantiomeric purity and abs. configuration of amines, cyanohydrins, and amino acid esters.
IT **75336-96-8 131065-35-5**
RL: PRP (Properties)
(NMR of, in presence of dioxolanedimethanol deriv. as chiral shift reagent)
RN 75336-96-8 CAPLUS
CN Piperazine, 1,2,4-trimethyl-, (S)- (9CI) (CA INDEX NAME)

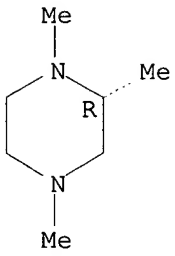
Absolute stereochemistry.



C vM

RN 131065-35-5 CAPLUS
CN Piperazine, 1,2,4-trimethyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.


Me
N
Me
R
N
Me

=> d bib hitstr 4-30

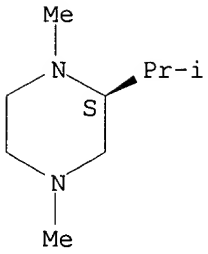
L15 ANSWER 4 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1992:633579 CAPLUS
DN 117:233579
TI Optically active biphenyl derivatives and their use in resolution of organic compounds
IN Toda, Fumio
PA Daicel Chemical Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04193842	A2	19920713	JP 1990-293412	19901029
	JP 2872800	B2	19990324		
	US 5202504	A	19930413	US 1991-646096	19910125
	US 5276214	A	19940104	US 1992-993116	19921218
PRAI	JP 1990-293412	19901029			
	US 1991-646096	19910125			

OS MARPAT 117:233579
IT **131022-13-4**
RL: PRP (Properties)
(chem. shift of, in presence of optically active tetrachlorobis(hydroxydiphenylmethyl)biphenyl as chiral shift agent)
RN 131022-13-4 CAPLUS

L15 ANSWER 5 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1991:491745 CAPLUS
DN 115:91745
TI Chiral ligands containing heteroatoms. 7. An investigation on the stereochemistry of the ketone reductions by chiral diamines/tin hydride systems
AU Falorni, Massimo; Giacomelli, Giampaolo; Marchetti, Mauro; Culeddu, Nicola; Lardicci, Luciano
CS Dip. Chim., Univ. Sassari, Sassari, I-07100, Italy
SO Tetrahedron: Asymmetry (1991), 2(4), 287-98
CODEN: TASYE3; ISSN: 0957-4166
DT Journal
LA English
OS CASREACT 115:91745
IT **126839-93-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and complexation with tin dichloride, for enantioselective redn. of ketones)
RN 126839-93-8 CAPLUS
CN Piperazine, 1,4-dimethyl-2-(1-methylethyl)-, (S)- (9CI) (CA INDEX NAME)

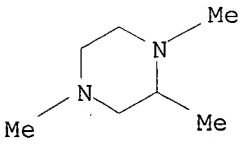
Absolute stereochemistry.



L15 ANSWER 6 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1991:228951 CAPLUS
DN 114:228951
TI Preparation of 1,2,5-trimethylpiperazine as catalyst for polyurethane foam manufacture
IN Arakawa, Tatsuya; Kagawa, Hisashi
PA Kawaken Fine Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 02218669	A2	19900831	JP 1989-40999	19890221

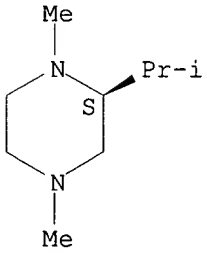
IT **120-85-4P**, 1,2,4-Trimethylpiperazine
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as catalyst for polyurethane foam manuf.)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L15 ANSWER 7 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1991:163628 CAPLUS
DN 114:163628
TI Chiral ligands containing heteroatoms. V. Enantioselective ketone reduction using chiral diamines-metal hydride systems
AU Falorni, Massimo; Giacomelli, Giampaolo; Lardicci, Luciano
CS Dip. Chim., Univ. Sassari, Sassari, I-07100, Italy
SO Gazz. Chim. Ital. (1990), 120(12), 765-9
CODEN: GCITA9; ISSN: 0016-5603
DT Journal
LA English
OS CASREACT 114:163628
IT **126839-93-8P**

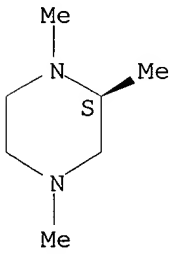
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as chiral reducing agent with zinc chloride and diisobutylaluminum hydride)
RN 126839-93-8 CAPLUS
CN Piperazine, 1,4-dimethyl-2-(1-methylethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



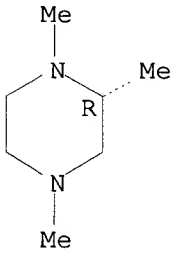
L15 ANSWER 8 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1991:23472 CAPLUS
DN 114:23472
TI Optically active 4,4',6,6'-tetrachloro-2,2'-bis(hydroxydiphenylmethyl)biphenyl as a host for optical resolution and a chiral shift reagent
AU Toda, Fumio; Toyotaka, Ritsuji; Fukuda, Hideji
CS Fac. Eng., Ehime Univ., Matsuyama, 790, Japan
SO Tetrahedron: Asymmetry (1990), 1(5), 303-6
CODEN: TASYE3; ISSN: 0957-4166
DT Journal
LA English
IT **131022-13-4**
RL: PROC (Process)
(resoln. of, by complexation with tetrachlorobis(hydroxydiphenylmethyl) biphenyl)
RN 131022-13-4 CAPLUS
IT **75336-96-8 131065-35-5**
RL: PROC (Process)
(sepn. of, from enantiomer, by complexation with tetrachlorobis(diphenylhydroxymethyl)biphenyl)
RN 75336-96-8 CAPLUS
CN Piperazine, 1,2,4-trimethyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

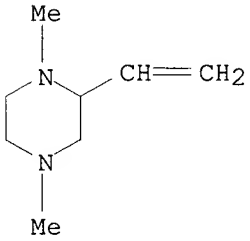


RN 131065-35-5 CAPLUS
CN Piperazine, 1,2,4-trimethyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



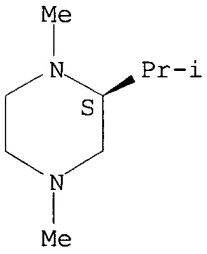
L15 ANSWER 9 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1990:216868 CAPLUS
DN 112:216868
TI Palladium(0)-catalyzed reaction of (Z)-2-butene-1,4-diyl bis(methyl carbonate) and (Z)-2-butene-1,4-diyl diacetate with bifunctional nitrogen nucleophiles
AU Tsuda, Tetsuo; Kiyoi, Takao; Saegusa, Takeo
CS Fac. Eng., Kyoto Univ., Kyoto, 606, Japan
SO J. Org. Chem. (1990), 55(10), 3388-90
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 112:216868
IT **126544-39-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 126544-39-6 CAPLUS
CN Piperazine, 2-ethenyl-1,4-dimethyl- (9CI) (CA INDEX NAME)



L15 ANSWER 10 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1990:197719 CAPLUS
DN 112:197719
TI Chiral ligands containing heteroatoms. IV. Temperature dependence of enantioselectivity in å tin(II) hydride reduction of ketones
AU Falorni, Massimo; Lardicci, Luciano; Piroddi, Anna; Giacomelli, Giampaolo
CS Dip. Chim. Chim. Ind., Univ. Pisa, Pisa, I-56126, Italy

SO Gazz. Chim. Ital. (1989), 119(9), 511-12
CODEN: GCITA9; ISSN: 0016-5603
DT Journal
LA English
OS CASREACT 112:197719
IT **126839-93-8**
RL: RCT (Reactant)
(ligand, with tin for enantioselective redn. of ketones)
RN 126839-93-8 CAPLUS
CN Piperazine, 1,4-dimethyl-2-(1-methylethyl)-, (S)- (9CI) (CA INDEX NAME)

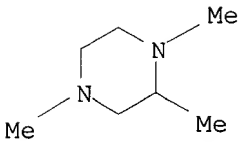
Absolute stereochemistry.



L15 ANSWER 11 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1990:58737 CAPLUS
DN 112:58737
TI Process and catalysts for the manufacture of amines
IN Olson, Kurt Damar; Kaiser, Steven William; Reichle, Walter Thoams; Doumaux, Arthur Roy, Jr.; Schreck, David James; McCain, James Herndon
PA Union Carbide Corp., USA
SO PCT Int. Appl., 259 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8905810	A1	19890629	WO 1988-US4454	19881216
	W: JP				
	RW: BE, DE, FR, GB, IT, NL, SE				
	US 4973709	A	19901127	US 1987-134815	19871218
	EP 345330	A1	19891213	EP 1989-900779	19881216
	R: BE, DE, FR, GB, IT, NL, SE				
	JP 02502541	T2	19900816	JP 1989-500651	19881216
	JP 03127764	A2	19910530	JP 1989-262300	19891009
PRAI	US 1987-134815	19871218			
	US 1988-282371	19881213			
	WO 1988-US4454	19881216			

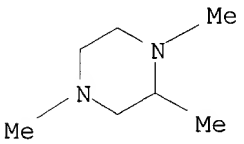
IT **120-85-4P**
RL: PREP (Preparation)
(manuf. of amines and, catalysts for)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L15 ANSWER 12 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1989:498603 CAPLUS
DN 111:98603
TI Metabolically acceptable polyisocyanate adhesives and their surgical uses
IN Fuller, William D.; Blair, Robert K.; Goodman, Murray
PA BioResearch, Inc., USA
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8900589	A1	19890126	WO 1988-US2399	19880715
	W: AU, JP				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	US 4829099	A	19890509	US 1987-74597	19870717
	AU 8821317	A1	19890213	AU 1988-21317	19880715
	AU 601351	B2	19900906		
	EP 328585	A1	19890823	EP 1988-906631	19880715
	EP 328585	B1	19940907		
	R: DE, FR, GB, IT				
	JP 02500815	T2	19900322	JP 1988-506445	19880715
	ES 2018635	A6	19910416	ES 1988-2297	19880717
PRAI	US 1987-74597		19870717		
	WO 1988-US2399		19880715		

IT **120-85-4**, 1,2,4-Trimethylpiperazine
RL: CAT (Catalyst use); USES (Uses)
(catalysts, polyisocyanate-based adhesives contg., for living tissue and surgical use)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

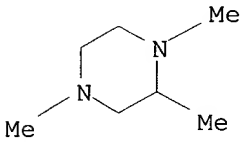


L15 ANSWER 13 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1988:509996 CAPLUS
DN 109:109996
TI Crystalline complex compounds of proparglyic alcohols with tertiary diamines, and a process for separation and purification of propargylic alcohols using them
IN Toda, Fumio; Tanaka, Kōichi; Ataka, Kikuo

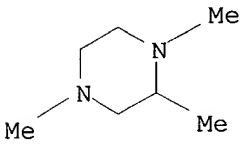
PA Ube Industries, Ltd., Japan
SO Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 256745	A2	19880224	EP 1987-306879	19870804
	EP 256745	A3	19890906		
	EP 256745	B1	19920513		
	R: CH, DE, LI				
	US 4918190	A	19900417	US 1987-79821	19870730
	JP 63152336	A2	19880624	JP 1987-195327	19870806
	JP 07103053	B4	19951108		
	US 5043495	A	19910827	US 1990-475892	19900130
	JP 08092172	A2	19960409	JP 1995-28043	19950216
	JP 2573818	B2	19970122		
PRAI	JP 1986-183347	19860806			
	US 1987-79821	19870730			

OS MARPAT 109:109996
IT **120-85-4**
RL: RCT (Reactant)
(complexation of, with propargylic alcs.)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

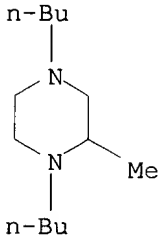


IT **120-85-4DP**, 2-Methyl-N,N'-dimethylpiperazine, complexes with propargylic alcs.
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

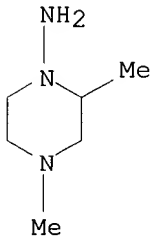


L15 ANSWER 14 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1987:451381 CAPLUS
DN 107:51381
TI C-Alkylpiperazines. XII. Synthesis and diuretic activity of compounds structurally related to clopamide
AU Landriani, L.; Barlocco, D.; Cignarella, G.; Curzu, M. M.; Anania, V.;

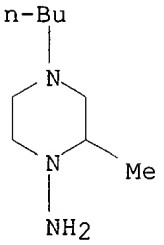
Desole, M. S.
CS Ist. Chim. Farm. Tossicol., Univ. Milano, Milan, Italy
SO Farmaco, Ed. Sci. (1987), 42(3), 191-204
CODEN: FRPSAX; ISSN: 0430-0920
DT Journal
LA Italian
IT **109055-58-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with nitrite)
RN 109055-58-5 CAPLUS
CN Piperazine, 1,4-dibutyl-2-methyl- (9CI) (CA INDEX NAME)



IT **109055-75-6P 109055-76-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 109055-75-6 CAPLUS
CN 1-Piperazinamine, 2,4-dimethyl- (9CI) (CA INDEX NAME)



RN 109055-76-7 CAPLUS
CN 1-Piperazinamine, 4-butyl-2-methyl- (9CI) (CA INDEX NAME)



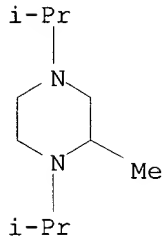
L15 ANSWER 15 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1985:569926 CAPLUS
DN 103:169926
TI Lithographic plate water developable photoimaging composition
PA Dainippon Ink and Chemicals, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 60093432	A2	19850525	JP 1983-200036	19831027

IT **98673-93-9**
RL: USES (Uses)
(photoimaging compn. contg., water-developable, for lithog. plate prepn.)
RN 98673-93-9 CAPLUS
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with 2,4-diisocyanato-1-methylbenzene and (2-methyl-1,4-piperazinediyl)bis[methylethanol] (9CI) (CA INDEX NAME)

CM 1

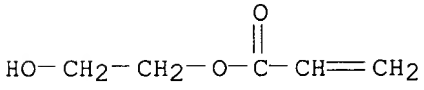
CRN 84886-94-2
CMF C11 H24 N2 O2
CCI IDS
CDES *



2 (D1—OH)

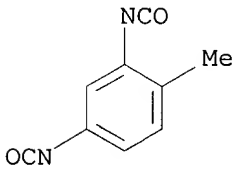
CM 2

CRN 818-61-1
CMF C5 H8 O3



CM 3

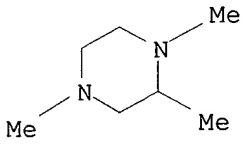
CRN 584-84-9
CMF C9 H6 N2 O2



L15 ANSWER 16 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1985:407347 CAPLUS
DN 103:7347
TI Stabilization of the B-side of polyurethane foam-producing compositions
IN Kennedy, Richard B.
PA Fricke, Richard J., USA; Crehan, Patrick J.
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4515638	A	19850507	US 1984-634786	19840726

IT **120-85-4**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, storage-stable polyol compns. contg., for polyurethane manuf.)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

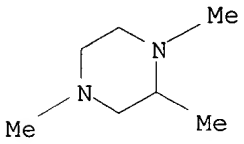


L15 ANSWER 17 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1985:96223 CAPLUS
DN 102:96223
TI Enhancing stereospecificity of a catalyst system
IN Triplett, Kelly B.
PA Stauffer Chemical Co. , USA
SO U.S., 9 pp.
CODEN: USXXAM
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4487845	A	19841211	US 1980-148336	19800509

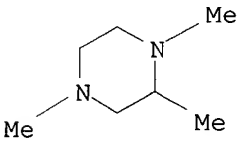
IT **120-85-4**
RL: CAT (Catalyst use); USES (Uses)
(catalysts contg., with improved stereospecificity, for polymn. of olefins)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L15 ANSWER 18 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1983:546147 CAPLUS
DN 99:146147
TI Polyurethanes for hemodialysis membranes
IN Wick, Gerhard
PA AKZO G.m.b.H. , Fed. Rep. Ger.
SO Ger. Offen., 20 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3147025	A1	19830601	DE 1981-3147025	19811127
	US 4433128	A	19840221	US 1982-443739	19821122
	JP 58093716	A2	19830603	JP 1982-204704	19821124
	JP 03028449	B4	19910419		
PRAI	DE 1981-3147025		19811127		

IT **120-85-4**
RL: CAT (Catalyst use); USES (Uses)
(polymn. catalyst, in polyurethane prepn., for hemodialysis membranes)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L15 ANSWER 19 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1983:127816 CAPLUS
DN 98:127816
TI Thermosetting polyurethane coating compositions

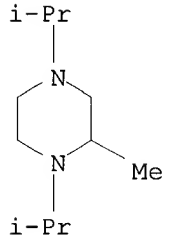
PA Dainippon Ink and Chemicals, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 57145161	A2	19820908	JP 1981-29409	19810303
JP 63049690	B4	19881005		

IT **84886-95-3**
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, with low baking temp.)
RN 84886-95-3 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, 1,6-diisocyanatohexane, (2-methyl-1,4-piperazinediyl)bis[methylethanol] and oxiranylmethyl 2-methyl-2-propenoate
(9CI) (CA INDEX NAME)

CM 1

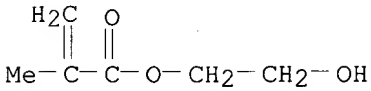
CRN 84886-94-2
CMF C11 H24 N2 O2
CCI IDS
CDES *



2 (D1—OH)

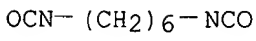
CM 2

CRN 868-77-9
CMF C6 H10 O3



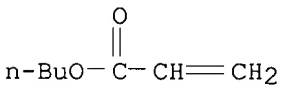
CM 3

CRN 822-06-0
CMF C8 H12 N2 O2



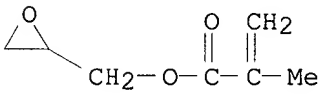
CM 4

CRN 141-32-2
CMF C7 H12 O2

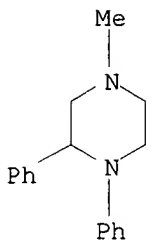


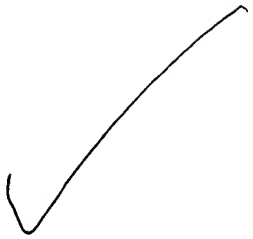
CM 5

CRN 106-91-2
CMF C7 H10 O3



L15 ANSWER 20 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1982:400292 CAPLUS
DN 97:292
TI Presynaptic .alpha.-block and inhibition of noradrenaline and 5-hydroxytryptamine reuptake by a series of compounds related to mianserin
AU Nickolson, Victor J.; Wieringa, Joop H.
CS Org. Sci. Dev. Group, Oss, Neth.
SO J. Pharm. Pharmacol. (1981), 33(12), 760-6
CODEN: JPPMAB; ISSN: 0022-3573
DT Journal
LA English
IT **23174-96-1**
RL: BIOL (Biological study)
(hydroxytryptamine and noradrenaline reuptake by brain inhibition and presynaptic .alpha.-adrenoceptor blockade by, structure in relation to)
RN 23174-96-1 CAPLUS
CN Piperazine, 4-methyl-1,2-diphenyl- (8CI, 9CI) (CA INDEX NAME)

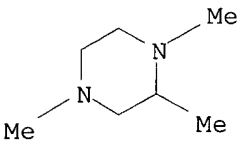


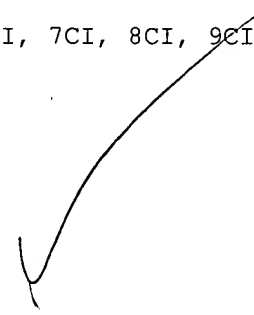


L15 ANSWER 21 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1982:36432 CAPLUS
DN 96:36432
TI Semiflexible polyurethane cellular foams of improved damping characteristics
IN McBrayer, Robert Lewis
PA BASF Wyandotte Corp., USA
SO Brit. UK Pat. Appl., 7 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2063894	A	19810610	GB 1980-33142	19801014
	CA 1147900	A1	19830607	CA 1980-359988	19800910
PRAI	US 1979-84788		19791015		

IT **120-85-4**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for manuf. of polyurethane foams, with improved damping properties)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

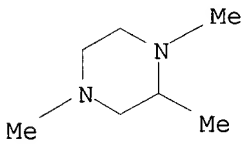




L15 ANSWER 22 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1981:66444 CAPLUS
DN 94:66444
TI Latent Lewis acid catalyst system
IN Newell, Richard G.
PA Minnesota Mining and Mfg. Co., USA
SO U.S., 12 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4225460	A	19800930	US 1979-53056	19790628
	FR 2460157	A1	19810123	FR 1980-14233	19800626
	FR 2460157	B1	19830218		
	ES 492807	A1	19810416	ES 1980-492807	19800626
	DE 3024264	A1	19810108	DE 1980-3024264	19800627
	DE 3024264	C2	19931111		
	AU 8059711	A1	19810108	AU 1980-59711	19800627
	AU 530938	B2	19830804		
	JP 56010525	A2	19810203	JP 1980-87703	19800627
	JP 63033488	B4	19880705		
	GB 2054514	A	19810218	GB 1980-21081	19800627
	GB 2054514	B2	19830505		
	BR 8004031	A	19810310	BR 1980-4031	19800627
	ZA 8003882	A	19810930	ZA 1980-3882	19800627
	CA 1136598	A1	19821130	CA 1980-355011	19800627
PRAI	US 1979-53056	19790628			

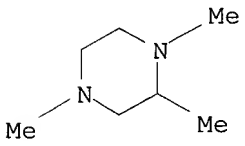
IT **120-85-4**
RL: USES (Uses)
(scavengers, for excess Lewis acid catalysts for epoxy resin manuf.)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L15 ANSWER 23 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1981:48042 CAPLUS
DN 94:48042
TI Stereoregular polymerization of .alpha.-olefins
IN Giannini, Umberto; Cassata, Antonio; Longi, Paolo; Mazzocchi, Romano
PA Montedison S.p.A., Italy
SO U.S., 10 pp. Cont.-in-part of U.S. Ser. No. 845,945, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4226963	A	19801007	US 1978-959604	19781113
	US 4156063	A	19790522	US 1977-845947	19771027
PRAI	IT 1971-26275	19710625			
	US 1972-265438	19720623			
	US 1972-265503	19720623			
	US 1974-503765	19740906			
	US 1974-503963	19740916			
	US 1975-593991	19750708			
	US 1975-599412	19750728			
	US 1977-845945	19771027			
	US 1977-853749	19771121			

US 1972-265455 19720623
US 1974-503766 19740906
US 1975-593992 19750708
IT **120-85-4**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for stereospecific polymn. of propylene)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

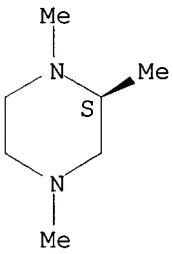


L15 ANSWER 24 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1980:603904 CAPLUS
DN 93:203904
TI The absolute configurations of (+)- and (-)-2-methylpiperazines and their N-methyl derivatives
AU Armarego, Wilfred L. F.; Schou, Henning; Waring, Paul
CS John Curtin Sch. Med. Res., Aust. Natl. Univ., Canberra, 2600, Australia
SO J. Chem. Res., Synop. (1980), (4), 133
CODEN: JRPSDC; ISSN: 0308-2342
DT Journal
LA English
IT **75336-97-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of)
RN 75336-97-9 CAPLUS
CN Piperazine, 1,2,4-trimethyl-, (S)-, compd. with 2,4,6-trinitrophenol (1:3)
(9CI) (CA INDEX NAME)

CM 1

CRN 75336-96-8
CMF C7 H16 N2
CDES 1:S

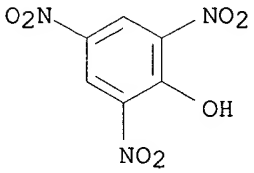
Absolute stereochemistry.



Searched by John Dantzman 703-308-4488

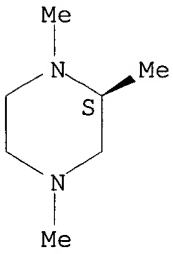
CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



IT **74879-17-7P 75336-91-3P 75364-80-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 74879-17-7 CAPLUS
CN Piperazine, 1,2,4-trimethyl-, dihydrochloride, (S)- (9CI) (CA INDEX NAME)

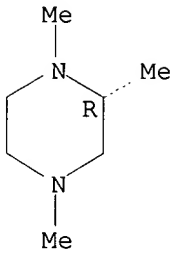
Absolute stereochemistry.



● 2 HCl

RN 75336-91-3 CAPLUS
CN Piperazine, 1,2,4-trimethyl-, dihydrochloride, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

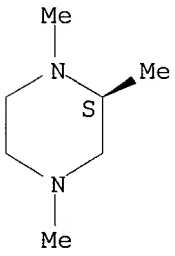


● 2 HCl

RN 75364-80-6 CAPLUS

L15 ANSWER 25 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1980:550214 CAPLUS
DN 93:150214
TI Absolute configuration of 6-methyl-5,6,7,8-tetrahydropterin produced by enzymic reduction (dihydrofolate reductase and NADPH) of 6-methyl-7,8-dihydropterin
AU Armarego, Wilfred L. F.; Waring, Paul; Williams, Jeffrey W.
CS John Curtin Sch. Med. Res., Aust. Natl. Univ., Canberra, 2601, Australia
SO J. Chem. Soc., Chem. Commun. (1980), (8), 334-6
CODEN: JCCCAT; ISSN: 0022-4936
DT Journal
LA English
IT **74879-17-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 74879-17-7 CAPLUS
CN Piperazine, 1,2,4-trimethyl-, dihydrochloride, (S)- (9CI) (CA INDEX NAME)

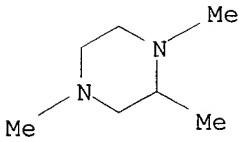
Absolute stereochemistry.



● 2 HCl

L15 ANSWER 26 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1976:43099 CAPLUS

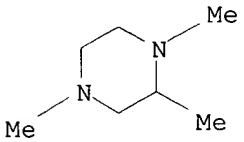
DN 84:43099
TI Ultrasonic relaxation associated with nitrogen and ring inversion in piperidines, piperidones, morpholines, and piperazines
AU Gittins, Vivian M.; Heywood, Peter J.; Wyn-Jones, Evan
CS Dep. Chem. Appl. Chem., Univ. Salford, Salford, Engl.
SO J. Chem. Soc., Perkin Trans. 2 (1975), (14), 1642-6
CODEN: JCPKBH
DT Journal
LA French
IT **120-85-4**
RL: PRP (Properties)
(ultrasonic relaxation in, conformational equil. in relation to)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L15 ANSWER 27 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1974:478675 CAPLUS
DN 81:78675
TI Poly(glycidic acid)
IN Vogt, Herwart V.; Davis, Pauls
PA BASF Wyandotte Corp.
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3790625	A	19740205	US 1970-66618	19700824

IT **120-85-4**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for polymn. of potassium glycidate)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

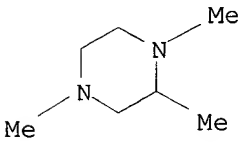


L15 ANSWER 28 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1974:450668 CAPLUS
DN 81:50668
TI Polyurethane adhesives for glass-fiber-reinforced polyester laminates

IN Larson, William M.; Bender, Newell R.
PA Goodyear Tire and Rubber Co.
SO U.S., 2 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 3812003	A	19740521	US 1972-217230	19720112
US 3935051	A	19760127	US 1974-444210	19740221

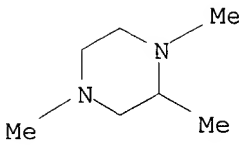
PRAI US 1964-360753 19640417
US 1969-833855 19690529
US 1970-9131 19700211
US 1972-217230 19720112
IT **120-85-4**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, with dibutyltin dilaurate, crosslinking polyurethane adhesives)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L15 ANSWER 29 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1974:439153 CAPLUS
DN 81:39153
TI Polyurethane sealant-primer system
IN De Santis, G. William
PA Essex Chemical Corp.
SO U.S., 6 pp. Division of U.S. 3,707,521 (CA 78;861345).
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 3779794	A	19731218	US 1972-222398	19720131
US 3707521	A	19721226	US 1970-16924	19700305

PRAI US 1970-16924 19700305
IT **120-85-4**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for crosslinking of polyurethane sealant-primer systems)
RN 120-85-4 CAPLUS
CN Piperazine, 1,2,4-trimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L15 ANSWER 30 OF 49 CAPLUS COPYRIGHT 2000 ACS
AN 1974:141107 CAPLUS
DN 80:141107
TI Pharmacological analysis of the role of the nervous system in inflammation
AU Trinus, F. P.
CS Kiev, USSR
SO Farmakol. Toksikol. (Kiev) (1973), No. 8, 40-7
CODEN: FATOBP
DT Journal
LA Russian